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THIRD MILITARY LIBRARIANS' WORKSHOP

October 8, 9, and 10, 1959

Monterey, California

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MILITARY LIBRARIANS'

WORKSHOP (3rd) October 8-10, 1957,
Monterey, California.

October Eighth, Ninth and Tenth

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Introduction

The Third Military Librarians' Workshop was held at the United States Naval Postgraduate School in Monterey, California, on October 8, 9, and 10, 1959. The program was planned by a committee consisting of Mr. John K. Cameron, Air University Library, Chairman; Miss Frances Carey, Naval War College Library; and Mr. John Nicolaus, Bureau of Ships Library.

Over one hundred librarians attended and thirty-two papers were presented along with several informal talks. Those presented for publication in the proceedings were prepared in multiple copies by their authors and were assembled, bound and distributed by the Library of the United States Naval Postgraduate School. The greatest gain, however, lies not in hearing the presentation of a series of papers, for these can be read--but rather in the discussions which follow and in the opportunity to find solution to our individual problems through contact with others.

George R. Luckett
Director of Libraries
U. S. Naval Postgraduate School

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Moderator

George R. Luckett

Professor and Director of Libraries

U. S. Naval Postgraduate School

Monterey, California

Thursday, October 8, 1959

Introduction and Summary

The first panel discussion of the Third Military Librarians' Workshop was preceded by welcome addresses by the Superintendent of the United States Naval Postgraduate School, Rear Admiral Elmer E. Yeomans, U. S. Navy, and the Academic Dean of the School, Roy S. Glasgow.

Papers presented were those not specifically designed to apply to the specialized panels which follow. Mr. Martin presented the results of his survey of Military library operations, and Mr. Macrae described for us the Scientific Information Service of the Defence Research Board of Canada, of which he is the Director. Miss Anderson discussed the place of the Library in a research activity, centering her presentation around the Library of the Rand Corporation and Mrs. Quinn reported on the progress of the expanded list of military periodicals.

In the discussions that followed, it was indicated that there was considerable interest in the continuation of the statistics compiled as a result of the survey of military libraries. Mr. Macrae's and Miss Anderson's papers, which were not furnished for publication, were enlightening in their coverage of the library organizational problems and their solutions as well as those of the organizations they serve. Mrs. Quinn, in behalf of her committee, pleaded for assistance in the work of compilation particularly from the staffs of those libraries located in or near Washington. As the panel session closed, several working volunteers came forward while others, living in the Washington area, volunteered housing for them during their period of service.

THE OPERATIONS OF

MILITARY TECHNICAL LIBRARIES

by

Robert L. Martin

Chief, Technical Library
Quartermaster Research and
Engineering Command
Natick, Mass.

The Operations of Military Technical Libraries

We have been discovering a few things about military technical libraries from the survey now being conducted. What we have learned so far is extremely interesting and important. We think the information will be of some concern to the conferees at this Workshop.

For the benefit of the few here who weren't at the 1958 Workshop, perhaps I should first of all give briefly the background of the study. We have been aware for some time of the need for compiling some basic and definitive data on the libraries serving the various agencies of the Defense establishment. There is widespread opinion among military librarians that library facilities of the Defense Department are unequal, spotty and often unsatisfactory. In some agencies existing facilities and services are inadequate and in others they are unfortunately almost nonexistent. Some of this opinion I think you will find borne out by our study.

By way of initiating some action on the matter we included on the program of the last Workshop a discussion on the "sizes and services of a research library". In the comment that ensued mention was made of a proposed Federal Libraries Study which had been presented to the Council on Library Resources by the D.C. Chapter of Special Libraries Association. It was not known at the time if this survey would include our libraries in the field, but we thought it best to defer any action until more could be learned of the Washington proposal. After reading

the outline of the proposed study and talking with people close to it, we learned that it would cover primarily the D.C. area libraries, our military libraries probably wouldn't be included, and it would take two years at the minimum for any results to be known after the Council granted funds for the study. So I went ahead as Division Chairman and got a group[1] together in Washington and held several meetings to refine a questionnaire and continue with our study.

The survey was limited to military "technical" libraries. These include libraries serving military schools and those attached to military organizations doing research and development. Hereafter I will refer to them briefly as "school" libraries and "research" libraries. One hundred and twenty (120) questionnaires were mailed; 55 have been completed and returned to date. I think this is a significant return because questionnaires were mailed liberally and to some places that I wasn't certain had a library. There is hope that a few more will be received.

A first glance at the returned questionnaires indicated some significant differences between school libraries and those serving research groups. The military schools seem to be much more library-oriented - having better budgets, higher ratio of staff to people being served and more use of materials in the library, whereas, the research libraries have freer circulation, and there was more use of materials in the laboratory. For conveniences of comparison and future use the returns

[1] Consisting of James Hodgson, Catherine Quinn, John Hetrick, Harry Cook, Logan Cowgill, Charles Knapp, Elmer Schloeder, Eva Liberman, and Robert Martin.

were tallied separately.

In the 55 returns, 46 were from research libraries and 8 from school libraries, plus the Army Library which seemed to be more related to the school library type of operation.

Here then are some of the facts brought out in the survey. Because of time limitations, it will be possible to hit only a few of the more general high points.

Military libraries are of rather recent origin. Out of the 46 research libraries, only 8 were established before 1940; one each year during 1936, 1934, 1929, 1918, 1917, 1900, and one traced back to 1842. Thirty-eight (38) libraries, or 82%, dated their founding during the last 20 years; 15 of the 46, or 33%, were established within the past 10 years, one as recently as 1959. 1946 seemed to be the big year for starting military school libraries with 3 in that year - 1 in 1950 - 1 in 1944 - 2 in 1924 and 1 each date back to 1919 and 1915.

This I think is a significant fact. Many of our present difficulties may be traced to this newness or recent entry of the military into research. We are still in the process of growing up, along with the agencies we serve. For that reason the things we do now are especially crucial, for we are at this stage setting the pattern for future development of the military library program.

The range in the number of persons being served in research libraries is very wide, going from 25 in one case (with a staff of 2 librarians) to a reported 20,000 in another group (served by a staff of 34); second highest group was reported at 6,000 (served by a staff of 39). More

often noted were organizations of the size of 300 researchers (4 groups of these); another with 1,000 population (6 of these); and, 5 of the size of 1,500 - and, of course, various ones at levels in between.

The school library population ranged from 300 (served by a staff of 44) to 30,000 (served by 38 librarians).

The ratio of staff to user ranged from a school library having 1 staff member for each 7 users to a research library reporting 1 staff member per 1,500 users.

Thirty-nine (39) of the research libraries reported a policy of serving people outside of the organization, giving in almost all cases reference, reading room and loan privileges, when requested.

The number of outsiders using the library facilities in a year were not too large though from the few reported figures, being in the neighborhood of less than 50 a year; although 3 reported 100. 1 served 150, 2 stated 200 outsiders, one 250, two 500, and one 1200.

Seven (7) of the 9 school libraries also had a generous policy of granting outsiders these privileges, although the three that supplied figures mentioned only 6, 12 and 100 users.

Fourteen (14) of the 46 research libraries have subordinate branch libraries, 7 having 1 each - 4 having 2 and 1 each with 3, 4, 5 and 6 branches. Another 3 reported 15, 20, and 32 subordinate libraries but these appeared to be only departmental or desk collections. Three (3) of the schools group reported branch libraries (the Army Library being included in this group), one each with 2, 3 and 5 branches.

Only 6 of the research libraries are on a base with other libraries nearby. Sixteen (16) libraries reported being near cities where there are collections in the same general subject field. But 17 reported having no other library less than 5 miles away, and 1 reported the nearest library being 400 miles away. Four (4) of the 9 school libraries reported others on the post; 3 were in towns with similar collections; 1 reported being 90 miles from the nearest library; and the remaining one gave no answer.

Working hours were of interest. Only 2 of the 48 research libraries reported a schedule other than regular daytime duty hours. One is open 1 evening a week to 9:30 p. m., and another, 3 evenings a week to 10 p. m. In addition, 5 libraries reported their doors are unlocked at all times, but with no staff on duty. This may also be the case with others who did not consider it important to report.

Only 1 of the school library group has no evening schedule, 5 reported Saturday hours (4 closing at noon) and 2 have Sunday afternoon schedules. One is unlocked at all times, but with no library personnel on duty.

Machine aids: Twenty-five (25) of the research libraries reported some form of mechanisation in their operations. With few exceptions, these were of the photocopy-reproduction type - microfilm and microcard readers, and Verifax, Thermofax, Osalid reproduction of catalog cards.

Three (3) mentioned IBM equipment for information searching - the

701 and 704, with 1 preparing to use the 709 model; 1 used Univac for indexing laboratory reports and translations; and, 3 use Flexowriter for cataloging and reports distribution operations.

Four (4) of the 9 in the school library group reported mechanized devices, with mention made of microfilming of documents and magazines, and Thermofax, Ozalid and Ditto reproduction facilities.

Library Committees: Only 11 of the 46 research libraries have a library committee. Two (2) reported they had a committee in the past, but they were unsuccessful. We might ask: Does a library with a committee have a better library? or, How effective are library committees? Taking 4 items as a sample of areas in which a committee could be expected to render some assistance to the library, e.g., budget, space, personnel, and non-library activities being performed, we find: among the 11 research libraries, 8 have a space problem, 8 have inadequate staff, and 3 others report problems of non-library activities being performed such as distribution of reports (2) and maintaining the fiction collection.

Disregarding the Army Library which has no library committee, all 8 school libraries have a library committee. One (1) reported inadequate budget, 5 need space, 4 need additional staff, and 3 reported minor problems of having to handle textbooks, order maps for instructors, and stock the study rooms with reprints.

Space: A glaring deficiency among military libraries is their space allowance. It is inadequate in all respects - reader, staff, and shelf area.

Thirty-seven (37) of the 46 research libraries and 6 of the 9 school libraries reported space deficiencies. Only 12 of the 55 libraries reporting considered their quarters adequate.

Typical comments ran like this:

> At least 4 times the present space is needed and 90% of the equipment should be replaced.
>
> We are at present very crowded and library is in four different areas.
>
> Need stack space increase of 50%.
>
> Librarian is located in two connected temporary buildings. Lighting is inadequate, a bare cement floor, no air conditioning, drafty in winter, crowded, inadequate in every respect.
>
> Space should be at least doubled for Reading room, office and work room, and quadrupled for Stacks and files (1688 sq. ft. additional).
>
> 10,000 sq. ft. additional space needed with accompanying equipment.
>
> Reading and research space is extremely inadequate and is isolated.
>
> Librarian has no office space, using only a desk in main reading room. 500 sq. ft. additional space needed for expansion of book shelving. Present basement storage rooms housing half the collection are very damp in summer, very hot in winter.

Several libraries reported plans for a new library.

Staff: Along with space, there were also many deficiencies in staffing. Thirty-seven (37) of the 46 research lib aries reported a need of additional personnel: six requiring 1 more, thirteen needing 2, three ...3, two...4, three...5, five...6, one...8, two...9, one ...10, and one needs 15.

Five (5) of the 9 libraries in the school group considered themselves understaffed, with 1 needing 1 additional, 2 need 2 more, 1 lacks 4, and 1 is 29 short of an adequate staff.

A total of 833 persons are employed in the 55 military libraries surveyed. In the 47 research libraries there are 256 professional positions, 188 sub-professional and 85 clerical, plus 5 translators, 1 chemist, 1 engineer, 5 geographers, 3 editors, 19 military, 6 messengers and 5 of other skills.

The school group reported 99 professional, 48 sub-professional, 54 clerical, 28 military, and 30 of other skills.

You may be interested in knowing the grade level of the Head Librarian with the number of each. In the research libraries, there are 4 at the GS-13 level; 15-GS12; 12-GS11; 2-GS10; 8-GS9; 3-GS7; 1-GS5. The school libraries have 1-GS15, 1-GS14, 4-GS12, 2-GS11, and, 1-GS9.

A number of other specific problems were mentioned: 22 research libraries mentioned purchasing as a major problem and a number went to some length to furnish statements on the particular complaints. Six (6) of the school libraries mentioned purchasing problems; 7 research libraries and 1 school library mentioned accountability; and, 10 research and 5 schools mentioned security problems.

As this has been just a preliminary report of only a small portion of the data, lifted at random from the returned questionnaires, and with the greater mass of detailed information on technical operations, expenditures, breadth of collections, services, etc. still to be correlated and

analyzed, no conclusions or recommendations are being suggested at this time. A comprehensive report of the study will be prepared which we trust can be used as a basis for further work in establishing certain minimum standards of facilities and functions, serving as a yard-stick by which all military libraries might measure themselves, and as a guide in establishing new libraries.

THE EXPANDED LIST OF MILITARY PERIODICALS

by

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Librarian

Air Force Office of Scientific

Research

Washington 25, D.C.

THE EXPANDED LIST OF MILITARY PERIODICALS

The Union List of Foreign Military Periodicals, Preliminary Edition of March 1957, was published by the Air University at the behest of the Military Librarians Division of S.L.A. In its 72 pages 356 titles were listed as the holdings of some 30 military and other libraries.

In the Fall of 1957 at the First Military Librarians Workshop at Air University, a report on "Cooperative Acquisition Planning for Military Libraries" was presented by Mr. Charles Stewart, Librarian, National Defense Department Library, Ottawa, Canada. In this report Mr. Stewart urged an enlargement of the Union List of Foreign Military Periodicals, and the discussions following his presentation brought out these facts:

1) There was universal agreement as to the desirability of a new edition.

2) It should be broader in scope to include titles not currently published.

3) It should include U.S. military journals.

As so often happens when someone delivers a message that all hearers agree to, future work on the matter is turned over to that individual, and so it became Charlie Stewart's lot to chair the session on the Union List at the Second Workshop. Out of this began also the compilation of a rather formidable correspondence file of letters, comments and suggestions!

At the Second Workshop at Fort Sill last October, the delegates accepted Mr. Stewart's proposal that the expansion of the Union List should become an inter-service project, and to this end the following representatives were chosen to form a committee to attack the problem:

Miss Ruth Longhenry - Army War College, ARMY.

Mr. George Luckett - Naval Postgraduate School, NAVY.

Mr. John Metrick - AF Office of Scientific Research, AIR FORCE.

Mr. Stewart agreed to serve as ex-officio chairman and to represent the Canadian military libraries. These people met later during the Workshop, with Mrs. Quinn

substituting for Mr. Metrick. Mr. Stewart presented at this time an excellently drawn-up outline of the problem which he had prepared together with suggestions from Mr. C. E. Dornbusch of the New York Public Library. This the Committee discussed and accepted with some minor clarifying changes, and it was this document that formed the basis of the Plan and Procedure for Compilation which was Inclosure 1 to the first letter request for periodical titles. It was also decided at this Fort Sill committee meeting that the best efforts of the project would be served if the Committee could work closely together, and Washington, D.C. was decided upon as being the logical center for such an activity. Therefore the following new names (of people in this area) were finally selected:

Miss Josephine Sullivan - Army Library, ARMY

Mrs. Catherine R. Quinn - AF Office of Scientific Research, AIR FORCE and Chairman

and Mr. Luckett deferred to a Navy representative to be invited to serve by the Chairman. Shortly after the Fort Sill meeting, Mr. Charles Greenwood, Coordinator of Navy Libraries in the Washington area accepted the Navy post on the Committee. A preliminary meeting, primarily held in order that the Committee could get acquainted with its newest member, was held in the AFOSR Library on 22 October 1958. Mr. Greenwood was briefed on the history of the project and brought up to date on what the Committee hoped to accomplish. It was decided to hold yet another planning meeting during the week of November 17-21 (ICSI), at which time Mr. Stewart was to be in Washington, and also Mr. Robert Martin, then Chairman of the Military Librarians Division, S.L.A., who was tentatively offering help in the reproduction and distribution of the hoped-for First Edition. The meeting was held - at breakfast in the Willard Hotel, on Sunday, November 17th, with the following members present: Mrs. Quinn, Mr. Greenwood, Mr. Martin, Mr. Stewart, Mr. Elmer Schloeder substituting for Miss Sullivan and Mr. Barnette (just sitting in, but it's terribly helpful to have his good advice at any time!

In a brisk two hour discussion of the problems, it was decided to send out a letter, inclosing the Plan and Procedure for Compilation, and a suggested form upon which the libraries could enter their titles (and other information) to all of the libraries represented at the First and Second Workshops. This was accomplished by the middle of December 1958, with a deadline for returns set for 1 February 1959. On 13 February, the packages of cards and their accompanying letters having arrived and been dutifully piled up in the office of the AFOSR Librarian (the Chairman), and no further replies seeming to be forthcoming, the Chairman wrote to all the Committee members plus a member of the Air University Staff (Mr. John R. McClurkin, Technical Assistant to the Director), arranging for a meeting of two day's duration to be held in Washington. This was accomplished on 5-6 March at the Army Library and Main Navy Library respectively.

There were a number of libraries which had not replied, or which had replied negatively to reporting any of their periodicals since their holdings contained no military titles, or were not permanently retained. "To be or not to be" was indeed the question as the Committee struggled in a back room of the Army Library. In the literally thousands of cards returned there were many titles that had arbitrarily to be discarded as not being truly military according to the definition (this incidentally was the biggest item of contention whenever any two or more of the Committee talked together!); and some truly agonizing decisions were made - each member having at least one pet title that he or she was loath to part with, although it was relatively easy to discard another's favorite title! It was an all-day job just sorting and alphabetising and these first rude files have since been made up in duplicate - one filing by title, the other by library.

The second day's meeting at Mr. Greenwood's Library (Main Navy) was devoted to wrapping up tag ends of problems and planning the next step, which seemed logically to be a checking edition.

Thanks for the Preliminary Checking Edition material must go to Miss Sullivan who has spent literally uncounted hours in organizing the bibliographical information for each title, and in making the See References. All of this material was taken to the Air University by Mr. Paul Burnette, who generously arranged to have his Reserve Military TDY approved to cover work on this project at the Air University. He and the staff members there worked hard and fast to edit the material, have it typed, reproduced, collated and distributed (all in two weeks time). They were distributed latein May, and by the middle of June were returned with additions and up-dating as requested in the cover letter.

Again the work seemed just to be beginning, for once more a fresh set of title cards was made up from the Checking Edition, and on these the holdings are listed by the reporting libraries, arranged according to the usage in Symbols Used in the National Union Catalog of the Library of Congress, 6th ed., rev., 1954. However, in quite a few cases, new symbols had to be devised; the assistance on this phase came from Mr. Elmer Schloeder of the Army Library. There are now 36 libraries represented, but not as yet a few of the more important ones from a holdings point of view. For instance, Main Navy, Infantry School, Ft. Benning, Air Force Cambridge Research Center, Industrial College of the Armed Forces, and the National War College have not as of this date reported their holdings.

There are six Canadian military libraries reporting, viz.: Dept. of National Defence Library, Ottawa, College Royal Militaire de St. Jean, P.Q., Royal Military College, Kingston, Ont., RCAF Staff College, Toronto, Ont., Canadian Service College, Royal Roads, Victoria, B.C., Fort Frontenac Library, Kingston, Ont.

A quick-and-dirty run through of the Checking Edition reveals that it contains some 740 titles, and Miss Sullivan informed me a few days ago that 56 new (previously unreported) titles had come in with the returned Checking Editions. This means that in all probability the new edition will run to more than 800

titles.

The work is now just about three-fifths completed, but there are still many bibliographical notes, questionable items and general snags to be decided upon and/or ironed out.

Special mention must be given to Mr. C.E. Dornbusch of the New York Public Library, who contributed a working set of the holdings of the NYP in the area of military journals, and I believe he deserves the thanks of the Military Librarians for his cooperation. Many of his notes were invaluable, and many of his title are singular in that so far only his great institution has reported them to us.

In conclusion, I wish again to thank all of you here (and those not fortunate enough to have been able to come) who have cooperated so well in this project, which uncompleted as it is has been considered by many to be a significant step forward toward a truly needed item of reference, to those members of the Committee and to all others who have contributed in any way.

There remain as I see it, and I present them to you for discussion these considerations:

1) The Library of Congress holdings have not even been begun to be reported. This presents a question of time and staff to accomplish this great task.
2) Should the present Committee be retained or is it time for new hands to take over?
3) The question remains regarding final editing, reproduction and distribution. The Air University has graciously proposed to do the final editing and making ready a manuscript for reproduction, but the form this should take and under whose auspices the publication should appear I will now leave up to the delegates.

INTRODUCTION TO

PANEL ON INFORMATION RETRIEVAL SYSTEMS

Moderator: J. Heston Heald

PANEL	PAPERS GIVEN
Patricia Stevenson Processing Librarian US Army Electronic Proving Ground Fort Huachuca, Arizona	Automation -- History and Background (Paper read by Richard A. Mountain, Head, Library, Naval Missile Center, Pacific Missile Range)
Henry Voos Chief, Literature Research Picatinny Arsenal Dover, New Jersey	Systems Approach to Information Storage and Retrieval (Paper read by Michael Costello, Chief, Technical Information Service, Picatinny Arsenal)
Eva Liberman US Naval Ordnance Laboratory Washington 25, D. C.	Information Retrieval -- Library Code for IBM 704
Charles R. Knapp Chief, Librarian Industrial College of the Armed Forces Washington 25, D. C.	Potential Uses of Microforms in the Military College Library
Charlotte Chesnut Chief, Librarian ABMA Library Redstone Arsenal Huntsville, Alabama	Microfilm Storage and Retrieval

PANEL ON INFORMATION RETRIEVAL SYSTEMS

Moderated By

J. Heston Heald, Chief, Document Processing Division
Armed Services Technical Information Agency (ASTIA)
Arlington, Virginia

Introduction: A great emphasis is now being placed in the field of automation. This trend is leading in many directions and at this point perhaps the picture is one of confusion. However, it is the very nature of research and development itself to come to a given end through many approaches. Whether good or bad, positive or negative, there is not a single effort that does not lend itself to a contribution toward the objectives. We know that science is progressing. Librarians can no longer sit back on the old conventional systems, tried and true as they are, with the feeling that they will never need anything better. Librarianship must advance just as science itself advances. Hence, the field of documentation is crowded with many efforts and there is not a single one here who has not employed some of them and who has not worked out schemes to fit his own needs. You will know what I mean when you consider such things as microfilm, microcards, punch cards, Uniterms, Descriptors, subject headings, computers, data processing equipment, etc., etc. Even the sophisticated art of preparing a technical abstract is now being approached with automation. Yes, we are all in the game, perhaps some more than others. The driving incentive toward increased effectiveness through automation and mechanical means is the thought that we will never get there unless we start and give it a try. The papers delivered here today relate several annals in this direction.

ASTIA itself, one of the largest collections of research and development technical reports, is in the throes of automation at the present time. We see, in the not too distant future, the disappearance of the 3 x 5 catalog card as a library technique. There must be, of course, many preliminary steps. ASTIA has invited the Military Librarians' Workshop to its Headquarters for the 1960 meeting. It is hoped that we will be in position to provide a program depicting a mechanical operation of most of our functions.

BACKGROUND OF LIBRARY AUTOMATION

THE TREND TOWARD LIBRARY AUTOMATION HAD ITS BEGINNINGS IN THE LATE 1930'S. AS EARLY AS 1937 FREDERICK J. KEPPEL, THEN PRESIDENT OF THE CARNEGIE CORPORATION, WARNED THAT THE FIELD OF LIBRARIANSHIP MUST KEEP UP WITH SCIENCE, AS THE FINANCE AND ACCOUNTING FIELDS HAD DONE, IN ORDER TO HANDLE THE TREMENDOUS AMOUNT OF PUBLISHED LITERATURE AND THE ACCOMPANYING PROCESSING, INDEXING, CATALOGING, AND RETRIEVAL PROBLEMS.[1] PRIOR TO WORLD WAR II, A GREAT PROBLEM FACED THE LIBRARY PROFESSION, THAT OF A LARGE VOLUME OF LITERATURE, INCREASING TO THE POINT WHERE CONVENTIONAL METHODS OF CLASSIFICATION, CATALOGING, AND RETRIEVAL COULD NO LONGER ADEQUATELY HANDLE IT. AFTER THE WAR, THE PROBLEM HAD BECOME EVEN MORE ACUTE, AND THERE WAS GREAT NEED FOR METHODS AND TECHNIQUES TO BETTER HANDLE THE ENORMOUS INFLUX OF PRINTED LITERATURE.[2]

THIS GREAT INCREASE IN LITERATURE WAS CAUSED PRIMARILY BY THE ENORMOUS VOLUME OF RESEARCH AND DEVELOPMENT LITERATURE PUBLISHED AS A RESULT OF THE WAR EFFORT. AFTER THE WAR THE DEMAND FOR NEW AND BETTER PRODUCTS ALSO BROUGHT OUT MUCH NEW LITERARY MATERIAL. THESE RESEARCH AND DEVELOPMENT REPORTS

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*THIS ACUTENESS WAS EVIDENT FROM STATEMENTS BY FREMONT RIDER IN HIS BOOK THE SCHOLAR AND THE FUTURE RESEARCH LIBRARY, WHERE HE SHOWED THAT THE INCREASE IN VOLUME, BOTH OF LITERATURE AND LIBRARY WORK WAS INCREASING AT AN INCREASING RATE.

AND PAPERS COMPOSED THE BULK OF THE PROBLEM, PARTICULARLY TO SCIENTIFIC AND TECHNICAL RESEARCH LIBRARIES. THIS PROBLEM PRESENTED TO THE LIBRARIES WAS TWO-FOLD IN NATURE: FIRST, A NEW AND MORE EFFICIENT METHOD OF INDEXING SUBJECT MATERIAL WAS NECESSARY FOR RELIABLE RETRIEVAL; AND SECOND, A SYSTEM FOR STORING THE INFORMATION WHICH PERMITS EFFICIENT SEARCHING OF THE FILES WAS ALSO NECESSARY.

ALMOST NOTHING WAS BEING DONE TO ALLEVIATE THIS PROBLEM EVEN AFTER WORLD WAR II. IN 1948 AT A MEETING OF THE ROYAL SOCIETY SCIENTIFIC CONFERENCE, IT WAS BROUGHT OUT THAT THE DESIGNERS WERE FAR AHEAD OF THE USERS IN MACHINES SUITABLE FOR USE IN LIBRARY WORK.[3] THESE MACHINES WERE BEING USED PRINCIPALLY IN THE FINANCE AND ACCOUNTING FIELDS. THE EQUIPMENT WAS AVAILABLE, BUT NO REAL EFFORT TO USE IT WAS BEING MADE, ESPECIALLY SINCE THE FEELING OF LIBRARIANS TOWARD MECHANIZATION HAD BEEN A RATHER COLD ONE.[4]

A SMALL AMOUNT OF EFFORT HAD BEEN MADE, HOWEVER, IN THE STATE-OF-THE-ART BY THE CHEMICAL INDUSTRY AND THE U.S. PATENT OFFICE, IN FIELDS WHERE THE PROBLEM OF INCREASED LITERATURE VOLUME WAS MOST ACUTE. DURING AND SOON AFTER WORLD WAR II A GREAT NUMBER OF NEW CHEMICAL COMPOUNDS WERE BEING CREATED AND THE PROBLEMS RELATED TO IN[illegible]ING AND LOCATING INFORMATION ABOUT ANY ONE COMPOUND WERE ALMOST INSOLUABLE BY EXISTANT TECHNIQUES. THIS SAME TYPE OF PROBLEM EXISTED IN THE PATENT

OFFICE WHERE A MULTITUDE OF NEW PATENTS WERE BEING SUBMITTED. TO SOLVE THE PROBLEMS OF INDEXING AND RETRIEVING INFORMATION HIDDEN IN FILES, PROGRAMS WERE INITIATED WHICH ATTEMPTED TO INDEX THE INFORMATION IN SUCH A WAY THAT IT COULD BE SIMPLY RETRIEVED. THE SYSTEMS WHICH WERE CONSIDERED FOR THE RETRIEVAL OF CHEMICAL INFORMATION AND FOR PATENTS WERE GENERALLY OF THE PUNCHED CARD TYPE.[5,6] THIS TYPE OF AUTOMATIC DATA PROCESSING EQUIPMENT WAS BEING USED QUITE UNIVERSALLY IN ACCOUNTING AND OPERATIONS OF THIS SORT. PROBLEMS IN INDEXING WERE STILL PRESENT, HOWEVER.

BY 1950 A NEW MOVEMENT TO CONQUER THE PROBLEMS FACING LIBRARIES WAS OBSERVED. PERHAPS THE MOST IMPORTANT STRIDE TOWARD SIMPLIFICATION OF LIBRARY PROCEDURE AND THINKING WAS A MASTERS THESIS WRITTEN BY P. A. BAGLEY AT THE MASSACHUSETTS INSTITUTE OF TECHNOLOGY IN 1951.[7] THIS THESIS, Electronic Digital Machines for High Speed Information Searching, DEALT WITH THE TWO MAIN PROBLEMS FACING THE LIBRARY PROFESSION: HOW TO INDEX THE LITERATURE FOR RAPID SEARCH AND RETRIEVAL; AND HOW TO ADAPT MACHINES TO THIS SEARCH AND RETRIEVAL. MR. BAGLEY TACKLED THE PROBLEMS INVOLVED IN INDEXING AND SEARCHING 50 MILLION DOCUMENTS WITHIN A REASONABLE LENGTH OF TIME. HIS PROGRAM WAS CARRIED OUT WITH THE LIBRARY OF CONGRESS COLLECTION IN MIND. THE COLLECTION WAS INDEXED BY THE USE OF DESCRIPTORS (TERMS WHICH CONSIST OF WORDS USED SINGLY OR IN GROUPS TO DESCRIBE THE SUBJECT MATTER OF THE DOCUMENT).

THESE DESCRIPTORS WERE USED IN CONJUNCTION WITH A DIGITAL COMPUTER WITH A MAGNETIC TAPE MEMORY. BAGLEY'S ORIGINAL SYSTEM, USING THE WHIRLWIND I COMPUTER REQUIRED 41,700 HOURS TO SEARCH THE FILE OF 50 MILLION DOCUMENTS. A MODIFICATION OF THE FIRST SYSTEM, ACCORDING TO THE REPORT, WOULD REQUIRE 16.7 HOURS TO SEARCH THE COLLECTION.

AFTER BAGLEY'S THESIS WAS PUBLISHED, A NUMBER OF DEVELOPMENTS IN THE AUTOMATION OF LIBRARY PROCEDURES BEGAN TO APPEAR. MUCH LITERATURE WAS BEING PUBLISHED WHICH MATHEMATICALLY AND LOGICALLY APPROACHED THE PROBLEMS OF INDEXING AND CO-ORDINATING PRINTED INFORMATION OF LIBRARIES. NEW SYSTEMS FOR STORING AND RETRIEVING INFORMATION WERE BECOMING KNOWN. THESE SYSTEMS UTILIZED THE PRINCIPLES OF NOTCHED CARDS, MICROPHOTOGRAPHY, PUNCHED CARDS, SPECIAL CODES AND DIGITAL COMPUTATION AND SEARCHING. SUCH SYSTEMS INCLUDED THE MINICARD SYSTEM[8], THE RAPID SELECTOR[9], PEEK-A-BOO SYSTEM[10], IBM 101[11] CARD COMPUTERS, AND THE USE OF DIGITAL COMPUTERS AS IN THE SYSTEM AT THE NAVAL ORDNANCE TEST STATION, CHINA LAKE, CALIFORNIA, WHERE THE IBM 701 AND 704 MACHINES ARE USED[12]. NEW METHODS OF INDEXING SUCH AS ZATOCODING[13], THE UNITERM SYSTEM[12, 14, 15], SYSTEMS FOR CHEMICAL COMPOUNDS[5], AND MANY OTHERS WERE INITIATED.

MOST IMPORTANT TO THE THINKING OF THE USAEPG TECHNICAL LIBRARY IS THE SYSTEM ESTABLISHED AT THE NAVAL ORDNANCE TEST

STATION, CHINA LAKE, CALIFORNIA.[15] THE ORIGINAL CONCEPT WAS FORMULATED IN 1953 BY M. E. TILLETT OF THE NAVAL ORDNANCE TEST STATION. THIS SYSTEM COULD CONCEIVABLY BE THOUGHT OF AS THE MATERIALIZATION OF BAGLEY'S IDEAS. TILLETT'S SYSTEM UTILIZED THE IDEA OF DESCRIPTORS WHICH INDEXED SUBJECTIVELY THE LITERATURE MATERIAL HELD BY THE NOTS LIBRARY, AND AN IBM 701 COMPUTER FOR SEARCHING THE FILES. THIS SYSTEM WAS LATER REVISED BY MORTIMER TAUBE TO INCORPORATE INDEXING OF THE MATERIAL BY THE UNITERM SYSTEM AND COORDINATE INDEXING. TAUBE'S INDEXING SYSTEM, BASED ON THE ASSOCIATION OF IDEAS, USED THE DESCRIPTOR CONCEPT. BY ARRANGING CALL NUMBERS ON A CARD, THE CALL NUMBERS UNDER ANY GROUP OF DESCRIPTORS COULD BE COMPARED FOR RETRIEVAL OF DOCUMENTS WITH COMMON DESCRIPTORS. THIS COORDINATE INDEX, AS IT IS CALLED, IS PROGRAMMED INTO AN IBM 704 COMPUTER WHICH SEARCHES THE LIBRARY FILES. THIS SYSTEM HAS BEEN IN OPERATION SINCE 1954 BUT HAS NOT BEEN FULLY UTILIZED BY NOTS SUBSCRIBERS[16].

SINCE 1951 SOME REAL ADVANCEMENT HAS BEEN MADE IN THE MECHANIZED RETRIEVAL OF INFORMATION. RELATIVELY LITTLE HAS BEEN DONE TO DECREASE THE WORK LOAD OF LIBRARIANS IN THE PROCESSING OF INFORMATION, HOWEVER. GREAT CHANGES IN THE PHILOSOPHY OF LIBRARIANS TOWARD AUTOMATION AND MECHANIZATION

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[16]THE SYSTEM IS DESCRIBED IN DETAIL IN A PAPER ENTITLED AN EXPERIMENT IN INFORMATION SEARCHING WITH THE 701 CALCULATOR.

HAS TAKEN PLACE SINCE 1954[4]. THE FIELD OF INFORMATION STORAGE AND RETRIEVAL AND PROCESSING IS NO LONGER SOLELY IN THE HANDS OF LIBRARIANS. THE KNOWLEDGE OF MEN FROM THE FIELDS OF ENGINEERING, MATHEMATICS, AND THE PHYSICAL SCIENCES IS BEING CHANNELED TOWARD MORE EFFICIENT AND RELIABLE MEANS AND TECHNIQUES FOR THE PROCEDURES OF LIBRARIANSHIP. COMPANIES SUCH AS GENERAL ELECTRIC[17], IBM[18, 19], AND REMINGTON RAND AND GOVERNMENT AGENCIES SUCH AS THE PATENT OFFICE[6], ATOMIC ENERGY COMMISSION[20], AND THE LIBRARY OF CONGRESS ARE CONSTANTLY WORKING TOWARD THE DEVELOPMENT OF NEW SYSTEMS FOR PROCESSING, STORAGE AND RETRIEVAL OF INFORMATION.

THE FUTURE FOR THE FIELD OF LIBRARIANSHIP LOOKS VERY BRIGHT. IN PROCESSING FOR EXAMPLE, MANY STUDIES RELATED TO WORD USAGE AND MEANING ARE BEING CONDUCTED IN ORDER THAT THE MANUAL ABSTRACTING AND INDEXING OF LITERARY MATERIAL BE REPLACED BY MACHINE. SUCH INSTRUMENTS AS ELECTRONIC READING AND WRITING PENCILS, ELECTRONIC PAGE READERS, AND MECHANICAL OR ELECTRONIC TRANSLATION EQUIPMENT ARE IN EXISTENCE OR EXPECTED IN THE FORESEEABLE FUTURE[2]. VAST STUDIES REGARDING FOLDING AND AUTOMATIC ENCODING ARE ALSO IN PROGRESS. THESE MACHINES AND SYSTEMS WILL INDEX AND STORE INFORMATION IN SUCH A MANNER THAT IT IS AVAILABLE AT THE TOUCH OF A BUTTON. THE BEST EXAMPLE MIGHT BE TAKEN FROM THE THOUGHTS OF UNESCO[21]. UNESCO ENVISIONS THE COMPILATION OF A BIBLIOGRAPHY WHICH WILL INCLUDE PUBLICATIONS AND LITERATURE OF THE ENTIRE WORLD,

WHILE A. M. DONLEY[7] ENVISIONS THE U.S. DIVIDED UP INTO A SYSTEM OF LIBRARY ECOLOGICAL REGIONS, BEING TIED TOGETHER THROUGH COMPUTERS, WHICH WOULD MAKE THE LITERATURE OF THE ENTIRE U.S. AVAILABLE TO ANY LIBRARY SUBSCRIBING TO THE SYSTEM.

IN CONCLUSION, THE FOLLOWING CHANGES IN THE LIBRARY FIELD ARE NOTED: A GENERAL CHANGE IN THE PHILOSOPHY OF LIBRARIANS TOWARD AUTOMATION AND MECHANIZATION; DEFINITE TRENDS TOWARD TAILOR-MADE CLASSIFICATION SYSTEMS; THE APPLICATION OF STATISTICAL ANALYSIS AND INFORMATION THEORY TO LIBRARY COLLECTIONS; AND THE INTRODUCTION OF MECHANIZATION FROM MICROFILMING FOR REDUCTION OF PHYSICAL INFORMATION TO DIGITAL COMPUTERS FOR RAPID RETRIEVAL OF THIS INFORMATION. THE FUTURE HOLDS MANY NEW SYSTEMS AND DEVICES WHICH WILL SPEED ALL FACETS OF INFORMATION PROCESSING AND RETRIEVAL, AND IT EVEN HOLDS THE POSSIBILITY THAT THE LITERATURE OF THE ENTIRE WORLD MAY BE READILY AVAILABLE TO ANYONE DESIRING IT.

SYSTEMS APPROACH TO INFORMATION STORAGE AND RETRIEVAL

THE UNITERM SYSTEM OF COORDINATE INDEXING

by

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This is an attempt to show a systems approach to information retrieval methods in terms of input and output. It enables libraries considering their use to have a realistic gauge for feasibility of adoption The Uniterm System of Coordinate Indexing is used as a concrete example.

Input. For input the following items must be considered: (literature research on systems, of course)

1. Space occupied by hardware.
2. Cost of hardware, initial or amortized.
3. Space and cost of cards, tapes, etc., considering their rate of growth.
4. Time and salaries for input per report.
5. Determination of standards for cost calculations.
6. Size of collection.

Output. For output the following items must be considered:

1. Space occupied by hardware.
2. Time to answer questions.
3. Number of people and number of questions that can be answered simultaneously.
4. Accuracy of retrieval.
5. Depth of retrieval (numbers, abstracts, actual reports).
6. User evaluation of previous use of system.
7. Ease of retrieval.

Then a total input-output comparison of the proposed systems must be made.

The Uniterm System of Coordinate Indexing, a case in point.

A collection of 2200 internal technical reports was put into the uniterm system to determine whether it was feasible to place the entire collection of 100,000 reports into this system, either manual or mechanical.

The 2200 reports were placed in the uniterm system in card and book form. All calculations are based on 2200 reports. Input data elicited are as follows:

1. a. One 5"X8" card catalog (2 drawers), 2146 cubic inches. Cost $10.50.

   b. Three volumes (index, vocabulary and abstracts), 187 cubic inches.

   Total space for a and b - 2333 cubic inches.

2. Space occupied by cards alone, 1200 cubic inches.

3. Cataloging input according to:

   a. Dollars.

      (1). Picatinny Arsenal Standard at $0.324 per report equals $713.00.

      (2). Rectified standard at $0.418 per report equals $920.00.

   b. Time.

      (1). Picatinny Arsenal standard 0.2011 hours per report.

      (2). Rectified standard 0.3219 hours per report.

      (3) Eugene Miller standard 0.3480 hours per report. Average 0.2903 hours per report. Variations in these standards are due to types of posting methodology and calculation.

4. Input for preparing Uniterm Index in book form is 0.415 hours per report.

Output evaluation is based on the following data:

a. A questionnaire which tested the users' satisfaction in the index.

b. A reference test which tested the retrieval power of the index against the standard card catalog.

c. Evaluation of validity of criticisms of the system.

(1). False drops.

(2). No browsability.

(3). Author or subject approach to the catalog.

(4). Number distribution on cards.

It must be remembered that the samples used in the above test were small, the test perhaps very naive. Yet, although validity of assumptions may be questioned, it does show a trend when all the items are evaluated together.

The questionnaire testing user satisfaction was distributed to 35 Army, Navy and Air Force agencies and to 25 Arsenal engineers and scientists to whom the index had been distributed. The replies from the agencies showed that the index was not being used very often. The reason for this, as taken from the comments made, is, of course, because the subject interests of various installations differ so widely. However, of the replies on use of the index, 77% retrieved the information quickly, and 78% retrieved what was desired. Two replies stated that they retrieved false drops. The same two also found the index a laborious device. Although not intending to read

interpretations into the text, it would seem that these people are using the index incorrectly. Data from internal replies give us more information since the index was within the field of interest of the user. 49% used the catalog a great deal, the remainder to a lesser degree. Of the total answers, 81% retrieved what was desired quickly.

The retrieval test was set up as follows:

a. Abstract cards were removed from the technical reports and filed in the standard card catalog.

b. Uniterms for these reports were posted on the uniterm cards.

c. A disinterested person (a chemist) was asked to compile reference questions which could be answered by our technical reports. Although requested, he failed to include a question, which, to his knowledge, had no answer.

d. Two reference librarians of equal experience, grade, and ability were given the questions to simulate the condition in which the patron requests aid from the librarian.

e. Two members of the Library staff of lesser experience were given the questions and asked to supply the answers. In each case the individuals were to locate the items and request the librarian to supply them. This simulated patron use of the catalogs.

Test results demonstrated that for the Reference Librarians it took 5.6 minutes per question to answer 40% of the questions from the card catalog.

whereas it took 10.80 minutes per question to answer 100% of the questions using the Uniterm Index. For the inexperienced case it took 17.4 minutes per question to answer 80% from the catalog and 4.2 minutes per question to answer 80% from the Uniterm Index.

An interesting point should be noted from the fact that 3 out of 4 were unable to answer one of the questions. It was discovered that this was due to errors in cataloging. The point that cannot be emphasized enough is that OUTPUT IS ONLY AS GOOD AS INPUT, NO MATTER HOW SOPHISTICATED THE MACHINERY UTILIZED.

In regard to false drops we must state that in three years we have experienced none. Regarding subject or author approach to the catalog as well as the topic of browsability, we can state from a limited study of one week that 57% of catalog use in our installation is by subject, 31% by author, and 12% by other approaches such as directories, etc. Browsability does not seem a vital problem in information retrieval within our Library.

Much has been stated on the subject of over-filling the Uniterm cards and consequent difficulties in coordination. A sampling of 20% of our existing cards (approximately 3000) was made, and the following facts came to light - less than 1% fill more than one card, and only 1% fill more than 50% of any card. There were 4 "see" references. The remainder of the numbers was evenly distributed.

In a period of 2 weeks only one generic study was required, and this was in response to an inquiry from an outside agency.

In conclusion, we were able to say the following about the Uniterm System (manual):

1. Low cost - no sophisticated hardware required.
2. Maximum dissemination of the index in book form.
3. Flexibility - free use of terms.
4. Depth of index gives maximum access.
5. Three-dimensional system. More than one person may search, and more than one question may be answered at a time.
6. Input requires little training.
7. Output is provided in terms of numbers which refer you to abstracts or reports, depending upon what is desired.

The foregoing evaluation of the Uniterm System in accordance with the criteria set up is an example of what should be done for all retrieval systems being considered. It is true that not all criteria listed can be applied to all systems.

After the facts are determined for each system, a table can be constructed which will give a visual comparison of results under each criterion.

From the pragmatic facts some subjective evaluations and determinations must be added to weigh the pros and cons. That is to say, that if an electronic means were to be cheaper, totalling both input and output, and [illegible] more information to more people, a decision is still required as to

whether space, air-conditioning, etc., could be provided. It should always be remembered that solutions to this problem should be practical, not theoretical.

This can be summarized succinctly with a quotation from Ralph Shaw's chapter entitled, "The Relation of Physical to Symbolic Systems":

> "What we have done in the past has been to start with a group of documents or data, and with almost no experience in handling them. Then we let a contract or take some other desperate step, and no matter what we did we could show an improvement ....We have gotten beyond the brush-fire stage and are trying to examine what we are really trying to do, what the alternative methods are for each set of conditions, and how we might best apply them." [1]

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(1) Shaw, R. "The relation of physical to symbolic systems." In: Taube, M. and H. Wooster. INFORMATION STORAGE AND RETRIEVAL. New York, Columbia, 1958. (Columbia University Studies in Library Science, No. 10.) p. 135

INFORMATION RETRIEVAL

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LIBRARY CODE

for

IBM 7094

by

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Information Retrieval

LIBRARY CODE FOR THE 704

When the Library at the Naval Ordnance Laboratory decided to utilize the IBM 704 for report cataloging and retrieval, the formulation of a machine code became necessary.

The IBM 704 uses magnetic tape for input and output of information. In order to get information onto magnetic tape, information must be punched on IBM cards and the 704 converts the punched card information into machine language.

The Hollerith punch card used by IBM has 80 spaces 72 of which are available for character punching (letters or numbers). A maximum of 12 6-letter words may be punched on a single card. If more than 12 code words are necessary for a single report, additional cards are punched for that report. Report identification code terms are repeated on each continuation card.

Punched card characters may be letters, numbers or punctuation marks. For report coding at NOL, it was decided to utilize an alphanumeric code consisting of 4 to 6 letters or numbers.

The information on the punched card is used for report identification and subject code terms. Six words or 36 columns are reserved to identify the report. The remaining 36 columns are used to code subject material, the number of subjects assigned to a report depending upon the complexity of the report.

The first code word would be four to six letters identifying the source or series:

NOLA	Naval Ordnance Laboratory
AERJ	Aerojet-General Corp.

SANI	Sandia Corp.
AECO	Atomic Energy Commission
NAVDOD	NAVORD OD (Ordnance Data)

The next word used is report number. This may be a number identifying a series such as 001517 for NAVORD Report 1517 or an accession number 109715. Six numbers are always used for this identification. If the number contains less than six digits, it is preceded by zeros for a total of six digits. The following four digits indicate date of report. Next two columns are used when needed to indicate change or deletion of report information. A single digit is used to indicate security classification:

S	-	Secret
C	-	Confidential
U	-	Unclassified
R	-	Restricted (used with British Reports)

The next three digits indicate total number of subjects assigned to a report - - S017 means that a report is secret and has 17 subject terms. The first 22 digits will be utilized for all reports; the next twelve digits may or may not be used depending upon two factors; 1) circulation limitations, and 2) additional identifying information of the report such as volume, revision, superseded, supplement, etc. which may be required to further identify a report.

For circulation limitations:

RRDA indicates Restricted Data

VTAA indicates VT fuse clearance required

NOFO indicates Not releasable to foreign nationals

NACO indicates Not available to contractors

The subject code will in most instances consist of four digits. Code terms are listed in a code dictionary and terms are defined for the benefit of persons assigning the code and the persons who will formulate retrieval information. In some instances, a code term will apply to a specific meaning of the word:

CURR	Currents	(Electric)
CURE	Currents	(Ocean)
ELEM	Waves	(Electromagnetic)
WAVE	Waves	(Ocean)
ACOU	Waves	(Sound)

or one code is used for a term and its synonyms, such as

Laminates	code	Plastics
Acoustics	code	Sound
Firing ranges	code	Ballistic ranges
Firing tables	code	Ballistic tables

Phrases which are of interest primarily as a unit are coded as a single term:

BAIR	Ballistic ranges
GROZ	Ground zero
ANOE	Angle of attack
HIGF	High frequency
HIGS	High speed
JETT	Jet stream
DOSE	Dose rate
WIRB	Wire bridge
KILL	Kill probability

to mention a few.

There is no limit to the number of subjects which may be assigned to a report - although the coder must bear in mind that retrieval may be by a general subject or a specific subject.

In addition to report identification and subject code terms for a particular report, a dictionary of code terms and their meaning are punched on IBM cards. As new terms are established additional cards are punched and the information transferred to magnetic tape. Changes in code terms, deletions and additions can be made when the need for changes and deletions arises.

Equipment is identified by model and other specific designation. For Navy developed ordnance the modification number is considered part of the identification.

Coding for the Mine Mark 51 would be

MINE	Mines
MARK	Mark
51Ø	51 Modification 0

For a report on the F-86 aircraft, the coding would be

AIRC	Airplanes
FIGH	Fighter
FØ86	Model designation

Since both zero and the letter O cannot be differentiated on the typewriter, a diagonal line through the zero is used to differentiate between the two.

Some problem areas have come to our attention as we proceeded with our analysis of reports. One involved the fact that Mark numbers which are used to identify Navy equipment would give incorrect information unless care were exercised. A Bomb Mark 90 may utilize a battery designated Mark . a fuze designated Mark 137. False drops would ensue in a search for the Mark 25 Bomb or Mark 25 Fuze as well as for a Mark 137 bomb or battery. In order to over-

come this difficulty, it was decided to code components of ordnance with an additional letter in order to avoid false drops. Ordnance pieces were designated as major items - such as mines, torpedoes, missiles, bombs, fire control equipment etc. Components were designated as minor items - such as batteries, fuses, detonators, primers, etc. When coding minor items the letter W following modification number would distinguish minor components.

Batteries Mark 25 would be coded

BATT	Batteries
MARK	Mark
25M[illegible]W	25 modificat'on 0

Mine Mark 25 would be coded as

MINE	Mines
MARK	Mark
25M[illegible]	25 modification 0

Therefore in retrieval for the Mark 25 Mine we would not retrieve the Mark 25 battery since the minor component has one additional letter (W) after modification number.

For equipment which does not employ the Mark number the difference between major and minor components does not constitute a problem. Clock delay mechanisms use the identification CD; sterilizers SD. A search for reports on the CD-12 would retrieve only reports coded with the terms

CDAA

[illegible]12

For sterilizers the search must be made for the code for sterilizer (SDAA) plus the model number of a particular sterilizer.

To differentiate between the noun form of a word and the verb, adverb or adjective, distinctive code terms are utilized. Defining the code term restricts its use and eliminates erroneous retrieval.

Thus -

Handling equipment is coded different from handling of equipment; cleaning equipment other than cleaning of equipment; transportation equipment employs code terms that differ from transportation of equipment.

Detonator is coded as DETN, detonating or detonated DETO. ACCR is the code for accelerators, ACCL for accelerated or accelerating. Simulator is coded as SIML; SIMU is the code for simulated or simulating.

Every attempt has been made to keep the code as simple as possible. Chemicals are separated into their component parts such as:

Trinitroethyl butyrate

TRIT Trinitro

ETHL Ethyl

BUTR Butyrate

Ammonium perchlorates

AMMN Ammonium

PERH Perchlorates

Names identifying equipment are given distinctive code terms. Thus a report discussing the Atlas missile would employ a distinctive code for ATLAS to differentiate it from a report issued by the Atlas Manufacturing Company on development work on handling equipment for a missile other than the Atlas missile.

Code words for projects, exercises, operations are used where applicable:

Operation Castle

Project White Oak

Project Hoboken

Exercise Surfboard

The philosophy of subject cataloging remains unchanged whether one is coding for the IBM 704 or whether conventional subject cataloging is done. The requirements of your clientele remains paramount.

The code dictionary contains 3000 terms covering 1000 reports now coded for the IBM 704. It is anticipated that 8000 - 10000 terms will be required to code the entire library collection of 100,000 reports.

POTENTIAL USES OF MICROFORMS

IN THE

MILITARY COLLEGE LIBRARY

by

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Potential Uses of Microforms in the Military College Library

The subject, "Potential Uses of Microforms in the Military College Library" is in itself a limited one, and to avoid the depression and helpless feeling one can get from considering all that has been written and said on microforms in general for the last 30 years, I hope to confine myself only to the one phase defined by the subject. I would also like to avoid the shizophrenia that is apparent in another field of interest - high fidelity. Among high-fidelity enthusiasts we have those who are devoted because it has unlimited possibilities for the gadget lover, even though he may never listen to music, and at the opposite end of the scale those who want only an end result, good music reproduction, and refuse to learn anything about "how" or "why." When dealing with microforms, methods and equipment can be an enveloping interest. Conversely, one may need the product without wanting to know anything about the process. Unfortunately the problem isn't quite that easy, for the two must be considered together, as I shall attempt to demonstrate.

First of all, let us ignore all of the conventional arguments about conserving space, and the relative merits of paper versus film for permanence. We can conceed that an original is almost always to be preferred to a microcopy. Likewise let us forget that reading machines can be used by only one person at a time and that there is little standardization and much variety of equipment and predicate our discussion wholly on what we forcefully project as the basic premise for all discussions of library administration - the mission of the library to furnish information, and to control the acquisition, processing and storage programs that support that mission. We can then apply the same criteria to microforms that we do to all other media: Is the item to be secured so important that it must be purchased; Is it of secondary interest; or is it unimportant? To these we must add one more: must it be preserved?

Thus the uses of microforms in military college libraries can be limited to titles having one of two qualifications: They must be in the library, or, they must be preserved.

Treating the later category first, I feel quite strongly that one of our most advantageous uses of microforms would be to preserve and protect what I would loosely term our local archives. Here we would include all those materials unique to our own institution: the speeches and lectures of visiting experts and guests, the reports of faculty, committees and students, possibly even college catalogs, or student and faculty biographies or registers. In short, consider here all those materials which would be

impossible to replace if the last remaining original copy should be lost. We must all have nightmares thinking of what could happen or has happened to some of these unique items. For example, last year we lost our sole remaining copy of an important paper when a borrower mislaid it. It is gone forever. By putting records and archives of this type of film or some other microform adaptable to reproduction, we need never admit to having been deprived of an irreplacable document. There may be an additional fringe benefit here: We are all faced from time to time with determined pressure to reduce, or at least stabilize, the total bulk of our holdings. I feel there would be much less pressure from the administration to destroy one or two drawers of film than to empty a designated number of feet of file cases or shelving. I would strongly urge even the most violent microphobe to seriously consider a program to preserve his unique materials before it is too late.

There is a second group of materials, allied to the first, tha. also are likely target for the microforms: the reports, documents, and records of agencies and institutions outside our own gates. This group would include the publications of associated schools, useful but frequently not available in edition copies, and such items as the reports of research agencies and contractors. We could also include here those older documents of the Federal Government which are no longer obtainable in the original form. You have probably found, as we have, that it is impossible to complete a set of the reports of the chiefs of the various services unless they are accepted in a microform. This limitation on available media becomes even more restrictive when attempting to secure copies of early congressional documents, and is the sole source (along with the photostat) for the internal papers or archives of a Federal agency. There seems to be no escape for even the most vocal objector - if we must have certain types of materials, we also must accept them as they are available - and frequently that available form will be a microform.

The easiest way to temper our resentment, if any, is to reconsider again our original concept of the library and its mission - to furnish information regardless of sourse. Vernon Tate in his excellent article in Library Trends pointed out that there was a similar resentment among scholars toward the printed book when it first appeared - they didn't like it and wanted the manuscript form. We should also reweigh our sometime concern over form rather than substance. When we need R&D documents we know full well how frequently we must accept a microform or some by-product such as a legible size positive print. The policy of ASTIA is most realistic in this respect, acknowledging and using the benefits of both the microform and the enlarged copy.

Perhaps the most familiar use of microforms will be to provide the library with useful periodical holdings, either runs or copies of single

articles. We have now progressed to the day when it is actually a rare instance to locate an administrator of a modern library who will not admit to having used the microforms for this purpose. To be practical, how else can we acquire those runs or single issues of periodicals which our changed curriculum demands that we must have, but which cannot be located on the market within a reasonable price and time bracket. We must consider the almost immediate availability of the film or card. This copy may not have as great an aesthetic appeal, and it will be expensive, it must be carefully controlled, stored and used, is somewhat unhandy, but it is available information--it can be used and we must have it.

A last category would seem to be the use of microforms as a substitute for an original book or monograph. Of course it is assumed that we would make a substantial effort to obtain an original. It is no use pretending that it is just a few old fogies that avoid the use and reading machines; anyone would rather have a book than a roll of film in a machine. Nevertheless, for the book or pamphlet that is OP and OS, and is not to be had on the second hand or rare book market, you may have to accept a microform, even of a textbook. As an aside, however, we should refer here to the University Microfilm's program of supplying OP and out-of-copyright books by photo-reproduction in a full size at moderate cost. In one sense we can refer to this obliquely as a microform, as the book has to pass through that stage to reach the consumer.

The statement was made at the beginning that I would attempt to stick closely to my limited subject, the uses of microforms. However there seems no escape from a brief mention of some of the problems that must be considered when starting to engage in a microform program. The problems cannot be avoided; as an administrator it is imperative that we have knowledge of relative costs, types of media, and equipment for their uses. We must become informed whether equipment interests us or not. This primary requirement exists because the acquisition process is so closely tied to the limitations and restrictions of the individual types of forms. For example, it should be recognized as basic that there are two main types, the microtransparancy (or microfilm) and the micro-opaque (or micropaper), that the transparancies are available in 16, 35, 70 and even 105 mm films, or ribbons, strips, sheets and single frames, and that there is no one reading machine that will accept all sizes and types. We should recognize that certain materials, as newspapers and long runs of periodicals are generally best secured in rolls, but that single periodical articles, pamphlets, and documents may be available in both microfilm strips and one of the opaque forms. And the micro-opaques can be microcard, microprint, microtape, microlex, microstrip, microtak (and we use these terms without any attempt to distinguish between trade and generic names). One must know that some micropaque forms are to be used for one-shot copy and that others are primarily edition or publishing forms, that some are

inexpensive and some very expensive, and the field covers the range from a true edition publication by a commercial form to a do-it-yourself kit.

We must recognize the sad fact that a program of any size is going to be expensive in terms of money and time, and that it must provide for personnel, training, equipment, storage and administration. This expense must be justified to those who will not share either your enthusiasm or needs. You will not be able to find one machine that does everything you want it to do; you will have to compromise and duplicate. You will soon recognize that there are attendant problems of bibliographical control that are monumental and still unsolved. And last of all, you must determine which forms, for your use are best in all respects: that is, self-indexing, best to read on the lowest cost but best and most easily operated reading machine, consumes the least amount of expensive storage, is most adaptable to the present library, and most important of all - the type which is most likely to further the mission of the library.

It seems that you can't avoid them, so you might as well enjoy them!

In closing let me turn abruptly to another topic: I am not sold on the idea of a formal paper as the best means of getting and giving information from a workshop. A workshop is apparently organized on the idea that if two heads are better than one, 80 ought to be at least 160 times better. Workshop means participation, not presentation. I feel strongly that the entire group would benefit greatly from hearing the experiences and attitudes of those in military college libraries who have intimate knowledge of what microforms can do to help them on their job.

MICROFILM PROGRAM OF THE ARMY BALLISTIC MISSILE AGENCY TECHNICAL DOCUMENTS LIBRARY

by

CHARLOTTE F. CHESNUT

Librarian

Technical Documents Library

Army Ballistic Missile Agency

Redstone Arsenal

Alabama

Microfilm Program of Army Ballistic Missile Agency Technical Documents Library

According to the printed program I am suppose to talk about information storage and retrieval. I must frankly admit that I am not qualified to talk about this broad and technical subject. Many big companies, and some governmental agencies, have studied and have introduced systems into their organizations and into their libraries. At this very moment a two week course is being given on Information Storage and Retrieval at the University of California, Los Angeles. At Western Reserve an International Conference on machine searching and translation was held 6-12 September. I mention these meetings to further point up the fact that storage and retrieval is a very pertinent question today. I will try to tell you something about the Army Ballistic Missile Agency library, and the little program of microfilming and use of IBM cards that we have in progress.

The ABMA celebrated its third birthday 1 February 1959. The Technical Documents Library is a little younger. It was thought about and talked about for several months before it actually came into being. In fact, the library was on the ABMA organization chart dated 12 June 1956. Like other government libraries, it has experienced several changes in administration and title, but all the time it has been a real library!

An acting Chief reported to duty 15 August 1956. She brought the library four years of library experience in the Technical Library of Redstone Arsenal and a wealth of knowledge regarding technical reports in the fields of rockets and missiles. You know the Army Rocket and Guided Missile Agency and the Army Ballistic Missile Agency are located on Redstone Arsenal and are segments of the Army Ordnance Missile Command.

The chief librarian arrived 15 October 1956. She brought technical library experience, and her subject speciality was atomic energy and related

subjects. Organizing a new library was another challenge. Having been with AEC for ten years and having helped orgamize several of its many libraries, this new job was exciting but not too difficult.

The basic plan for organizing, staffing and operating the Technical System (now Technical Documents Library) was prepared by Mr. George B. Cox, Chief, Information Office, Office of Ordnance Research, Durham, N.C. His paper was submitted 2 July 1956 and is still the source of much sound advice in solving library problems. So with a good guide, an experienced assistant and an old AEC librarian, the ARMA library soon got into action.

Mr. Cox suggested that the services and resources of ASTIA be exploited to the fullest extent. This was done and resulted in approximately 75,000 reports in microcard form, chosen from ASTIA's Distribution guide and based on needs as revealed in ARMA's mission. Continuing Mr. Cox's suggestion, a librarian from Library of Congress came down to assist in organizing the original shipment of ASTIA cards.

A temporary staff composed of typists, secretaries and messengers was assigned the job of filing the catalog cards. Miss Lois Robertson, my assistant, was the supervisor. For a period of one month, they worked seven days a week and often at night.

From the very beginning we knew that the reports collection would grow and that this growth must be controlled with judgment. Often we shut our eyes and part with treasures. Despite a well controlled requisition program and a continuous disposal (destruction) plan, the collection has grown to such a proportion that some action must be taken. Everything in the library has grown; the staff has doubled, the collection has multiplied, the service has grown (that is the way it should be), only the space has remained static. The vault is still 100 by 50 feet. We have a standing joke about my requisition for a balcony and rubber walls. The function of the library is incorporated

in this sentence: "Serves as principal source within ABMA for scientific and technical information of basic and applied research pertaining to the development and testing of ballistic missiles, propellants, astronautics and related items." It has been necessary to secure material on many other subjects because libraries must be prepared to answer many general questions. However, no attempt has been made to completely cover any one subject. We are, as our title states, a technical documents library.

Our documents come from several sources. Many of them are prepared by the ABMA staff and by contractors. The Department of Defense, Guided Missile Technical Information Distribution List (MTIL), AEC, ASTIA, Solid Propellant Information Agency and Liquid Propellant Information Agency are additional sources. Care has been exercised in collecting and cataloging, but in spite of this, space has become our great problem. Mrs. Jane Bentley, our Technical Processing (Cataloging) Chief began to work and think about a way to conserve space. Much time was spent reading and even visiting other installations to see what could be done. She visited General Electric in Cincinnati and saw an automatic retrieval system in operation using an IBM 704 (and it works). You probably have seen the article about this program. Microfilm seemed to be the answer. We were fortunate in having a program for engineering drawings in operation in ABMA. The coordinator of this program worked with the library and we were on our way with a pilot microfilm operation. No, really, it was not quite that easy.

In speaking of a recent grant given to the University of Chicago by the Council on Library Resources, Inc., Mr. Clapp said that the massive production of modern research literature is creating both an intellectual and a physical problem for contemporary scholars. The space problems of large research libraries are among the most serious the Council has found.

Mr. Fussler, of Chicago, said, "If valid distinctions of the actual or potential value of teaching and research can be made about books and documents, there may be very important modifications in space requirements of research libraries and increased flexibility in the physical or other means by which such materials may be organized for use without impairing the scholar's basic access to research materials!"

In discussing the grant and its use these libraries mentioned the very problems that are deviling ABMA. We will use the word documents and take off from there.

Space requirements, increased flexibility and satisfactory access to the material all enter into the problem. Reports and documents will continue to have historical value, of course, but they need not be kept immediately accessible. If substantial capital or operating savings can be realized in storing them in special storage buildings, microfilming them, or otherwise placing them in some category of deferred access, then the solution has begun.

Why are we putting some of our material on microfilm? At the present time, the primary reason for microfilming material is space conservation. Secondary objectives are easy reproduction of materials needed in larger quantities to satisfy users, and future applications in an automatic data retrieval system. What are we actually putting on microfilm? To date, only Redstone Arsenal, ABMA and ABMA contractor reports, and some urgently needed Department of Defense contractor reports have been microfilmed.

How did we decide what to put on microfilm?

The decision as to what to microfilm is based on:

1. Demand for the material. Seldom called-for items are microfilmed and full-size copies are destroyed to conserve space.

2. Requirements for extra copies of material. In cases where insufficient copies of an urgently needed document are received, and no prohibition on

reproduction exists, the document is microfilmed and hard copies are inexpensively reproduced on the Haloid machine. When requirements for full-size copies no longer exist, they can be destroyed and the microfilm retained for possible future use.

3. Material which has no lasting value is not microfilmed. (Facilities brochures, superseded documents, quickly out-dated information, etc.).

4. Documents bearing notices prohibiting reproduction have not been microfilmed.

Recordak Corporation, a subsidary of Eastman Kodak, has a contract with ARMA for microfilming engineering drawings and the library project was attached to this program. As I have said, so far our work has been just a pilot operation, which was begun the first of this year. The filming work is being done by one part-time employee (operator). The future program calls for a staff of three people. Two will log and prepare the reports for photographing. In order to achieve maximum quality, care must be exercised in preparing the material so it will lie flat on the board. The third staff member will operate the camera.

The filming is done on 35mm film at a reduction ratio of 15:1 for 8½ x 11 and 24:1 or 30:1 for larger sheets. At 15:1 Haloid reproductions are full-size. The film is mounted in IBM single aperture cards.

Cards are key-punched and interpreted with the following information:

1. Card code (identification number assigned to all library microfilm aperture cards).

2. Series (identification number assigned to document by library).

3. Date of document.

4. Frame number.

5. Camera and roll number.

6. Security and classification of document.

7. Deck code (distribution number).

Camera negative is mounted in Master Deck stored in library.

2nd generation positive roll is stored in separate area for safekeeping and future reproduction.

3rd generation negative is mounted in Working Deck for use in microfilm readers and for production of hard copies (usually Haloid).

Slave deck (dummy card without film used for key-punching cards containing film) to be used for listings (indexes and bibliographies).

The cards are stored in two Wright Line 24-drawer files. Capacity is 88,800 cards per cabinet; this gives room for approximately 177,600 cards. If we allow 20 cards per document this means approximately 8,800 documents can be stored in the two cabinets. The two files utilize about 10 square feet of floor space.

I will explain about the "quickies." The quickie feature means a lot to ABMA. In many instances we have only one or two copies of the report and the demand is for many more, and these demands must be met at once. So we microfilm and reproduce the required copies for ABMA use. One of our most exciting examples of quickies is the International Astronautical Federation papers. I returned one day with the papers, they were put on film the next day, were announced that week and the calls began to flow in. The men could hardly realize that the papers were available and some of the delegates hadn't gotten back from Europe! We had already submitted an order for the published proceedings, but they will not be available until next year.

Another question: Where is the reproducing machine housed and to whom does it belong? We (the library) schedule usage with Engineering Records Documentation Program. We get rather quick service. The Haloid Machine is a 24-inch copy flow. It rents for $3,300.00 per month. There are some bad features about the reproduced copies: Glossy photographs do not come out good, documents with little contrast background versus printed material are not

satisfactory. Color paper will come out as well as white paper.

Other available equipment includes:

IBM view printer

Recordak view printer

Microline (Oxalid) view printer.

I repeat, no more available space and quick service to our users prompted us to the microfilm program. We adopted a system already in operation in ABMA. You ask, "Will you prepare subject cards for use in future searching?" We will continue to make catalog cards, maintain card catalogs and do hand searching. At the present we are still studying and looking for a system that we believe will be entirely satisfactory for us. This reminds me of the answer I got when I asked a Russian librarian to tell me about their plans for storage and retrieval. He looked at me and calmy said, "We, like the rest of the world, are studying this problem and some day when a good program is worked out we will adopt it for our libraries." Yes, future application of an automatic data retrieval system is good for thought.

D I V I S I O N A L M E E T I N G

R E A D E R S S E R V I C E S

I N T R O D U C T I O N

Moderator

ERNEST DE WALD

Librarian

Army Map Service

Washington

DC

Readers Services Divisional Meeting

Yesterday most of us were concerned about this separate Divisional Meeting being conducted at the same time as the one on Library Administration. Most of us were also interested in the Library Administration Meetings. I see, however, that approximately one third of the entire Workshop attendance is present here this morning. The panel on Central Depositories in Military Libraries and the paper on Encouragement of Professional Reading by Military will be in tomorrows meeting in order that the panelists may attend the Library Administrative Meeting.

The intent of our meeting this morning is to exchange ideas and experiences in Military Schools regarding reference work as well as the general topic of copyrights.

We will have papers this morning on Readers Services to Students by Beth Simpson, Reference Work within Military School Libraries by James J. Slattery, and Copyright Practices in Military Libraries by Ernest DeWald.

I would like to suggest that any discussions, questions and comments follow each presentation.

REFERENCE WORK WITH STUDENTS IN THE SERVICE SCHOOLS

by

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STIMSON LIBRARY
ARMY MEDICAL SERVICE SCHOOL
BROOKE ARMY MEDICAL CENTER
Fort Sam Houston, Texas

REFERENCE WORK WITH STUDENTS IN THE SERVICE SCHOOLS

Reference services vary from locating and transmitting specific items of information to the writing of abstracts, compilation of bibliographies, and the searching of literature. In schools and colleges it also usually entails instruction in the use of the library. The tasks which the reference librarian is called upon to perform, then, are so diverse that it may be of interest to compare notes as we have through the questionnaire I mailed to you, and to have a short discussion of the subject here today.

I. Problem - and it really isn't a problem, but a question: what constitutes desirable reference service to our students? Do we err on the side of helping too much, or do we sometimes lack the initiative and the real concern necessary to make our libraries the vital part of the students' school experience that it ideally should be?

II. Factors affecting the case - by which I mean those differences which set us apart from our colleagues in the civilian colleges:

A. The school. As Miss Wesley pointed out last year, we vary greatly from the average four-year college. We must recognize this difference, study the mission of our school and the philosophy of education behind it before we can, in our libraries, adequately support this mission.

B. The curriculum of service schools is considerably more narrow than that of the four-year college. Courses can loosely be divided into

1. Those leading to the mastery of certain skills. These are the short-term courses in which the student is so spoon-fed with mimeos, handouts and practical exercises that he has little, if any, time for library work.

2. Advanced classes which require the completion of a staff study or paper. Such courses often require facility in the art of oral communication

as well. These demand extensive use of the library on the part of the student and often call upon the services of the interlibrary loan desk.

3. Credit courses leading to an advanced academic degree and requiring the presentation of a dissertation. Again, these courses demand much of the student in his research and reference use of the library and its interlibrary loan services.

C. The faculty in our service schools is another important factor in determining the type reference work which is done, and what is required of both student and librarians.

1 The short tenure of instructors is frustrating to most of us. The constant turnover and subsequent need for orienting the new officers is both time-consuming and disheartening.

2. Instructors have such a variety of backgrounds in military service, education, and teaching experience that we cannot make the same approach nor expect the same interest even from staff members of the same department.

3. Varying attitudes toward teaching, and knowledge of their own literature also will affect the demands made upon the student. Where teaching is not the lifelong vocation of our instructors our libraries will be challenged to provide more assistance to the instructor and, perhaps, less to the student.

D. The student is the fourth factor to be taken into consideration

1. Here again the variety in educational background among the personnel in the same class is noticeable and creates a challenge both for the instructor and librarian.

2. Differences in length of military service and in the student's attitude toward this educational opportunity and its effect on his career will contribute to the amount of work done in the library and in the interest in which the student performs his work.

III. Assumptions which can be made before going further, are these:

A. Reference service, wherever it is performed, is a form of teaching and instruction.

B. Good reference work with students should teach them how to help themselves.

IV. Discussion:

A. Goals of reference service in our schools should seek to acquaint the student with the following:

1. The library--its location, layout, services. Making arrangements whereby the student can come into the library, no matter for how short a period, should be attempted.

2. The literature of his particular course: books, periodicals, abstract journals, bibliographies, etc. In certain advanced courses, perhaps, this is the way to introduce the student to his library.

3. Tools which the student can learn to use in making his own literature searches.

4. Only in the rare instance (high-level schools of the joint services, perhaps) can the reference librarian be expected to perform literature searches for the individual or prepare bibliographies. From an unpublished thesis done at the University of Illinois in 1951 we learn that less than one-quarter of a large group of university librarians think the preparation of bibliographies should be attempted for anyone--staff or student!

B. Steps toward reaching these goals will vary with different situations plus the time and staff available, but perhaps could ideally follow this pattern:

1. Contact with the teaching staff. This must come first in order that the reference librarian can understand the aim of the course and the requirements of the students. This, too, is where justification is made for class instruction in library methods and time is given for orientation.

2. A library handbook, or manual, can serve to help the student particularly where no other opportunity is given the library for orientation. Lyle, in "The Administration of the College Library" has a very good section on this.

One word of caution can be inserted here as to when this manual can best be passed out. It is well to avoid having it issued when the masses of other mimeos and papers are thrust at the new arrival.

3. Formal library orientation: lecture-discussion, plus a tour of the library and a practical exercise. With the training aids available to most of us, this introduction can be done in the classroom to a larger group than can easily be handled in the library proper. Enough copies of the Wilson pamphlet on using the "Reader's Guide" should be furnished so that each member of the class can actually handle one and see the arrangement, learn the meaning of the abbreviations used, etc.

The matter of a written problem intrudes here, and this, as can be seen from the returns to the questionnaire, is not often used. Unless the questions can be identical to ones later used in their work, it would appear mere "busy work" and not too important. (See what Wedemeyer says in her article about student attitudes toward these problems.)

V. In summary, then, reference work with students in our schools should, to be most effective, be approached as

A. A teaching function. The librarian, in assisting the student, will teach him how to use the library for himself. This can often be done most easily by group instruction.

B. An opportunity to serve both instructor and student and to further the basic mission of the school.

C. A personal service. I like the way Mattis speaks of good reference

service as a "continuous conversation" with the student. We need this attitude among all of our librarians, but none more than our reference workers.

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Reference Services given to Students in Twenty-three Military School Libraries

	Yes	No	Occasionally
Librarian confers with faculty on content of required or collateral reading	19	3	1
On subjects proposed for student papers	9	11	3
Library offers formal orientation hours to students	17	4	2
a. Officer classes only	14	3	1
b. Enlisted classes only	10	3	2
c. All classes	2	15	
d. Given in classroom	3		1
e. Given in library	17		
f. Given in both places	3		2
g. Length of period-			
1 - 2 hours	12		
½ hour or less	3		
h. Presentation made by librarian	12		
Other professional staff	5		
i. Written problem required	5		
j. Proper form of bibliographical citation taught by library	*8	15	
Librarian prepares lists of references and bibliographies for students	9	9	5
Selected periodical articles are listed -			
Weekly	5		
Cards kept in regular catalog	4		
Cards kept by reference librarian		5	
Reference librarian maintains files of current military subjects not indexed elsewhere	7	11	
Library furnishes information on other posts and camps	13	9	1
Functio of reference librarian	13	10	
Reference division is responsible for inter-library loans	16	7	
Library uses franks, or otherwise pays postage	17	5	1
Students are asked to pay for this service	6	12	5

(Disparity in totals due to fact that several questions were not applicable, or sometimes were not answered.)

*Proper bibliographical form shown in library handbooks.

Reference Services to Students at Military Schools

Late in August a questionnaire was sent to the libraries listed below. There are one or two omissions, which I regret, and you will note that, as a matter of information only, I queried the Academy Libraries also. The response was excellent and I thank all of you who took time to send me your answers. You will find the results tabulated on the reverse side.

Ruth A. Simpson

Aeromedical Library
School of Aviation Medicine
Brooks AFB, Texas

Air Defense School
Fort Bliss, Texas

Air Force Institute of Technology
Wright-Patterson AFB, Ohio

Army Armor School
Fort Knox, Kentucky

Army Artillery & Missile School
Fort Sill, Oklahoma

Army Aviation School
Fort Rucker, Alabama

Army Information School
Fort Slocum, New York

Army Infantry School
Fort Benning, Georgia

Army Intelligence School
Baltimore, Maryland

Army Medical Service School
Fort Sam Houston, Texas

Army Ordnance School
Aberdeen Proving Ground, Maryland

Army Signal School
Fort Monmouth, New Jersey

Army War College
Carlisle Barracks, Pennsylvania

*Industrial College of the Armed Forces
Fort Lesley J. McNair, D. C.

Transportation Corps Library
Fort Eustis, Virginia

U. S. Naval Medical School
Bethesda, Maryland

U. S. Naval War College
Newport, Rhode Island

Quartermaster Library
Fort Lee, Virginia

Naval Postgraduate School
Monterey, California

National Defense College & Canadian
Army Staff College
Fort Frontenac, Kingston, Ontario

Canadian Services College
Victoria, British Columbia

Royal Canadian Army Medical Corps School
Camp Borden, Ontario

*College Militaire Royal de St. Jean
St. Jean, Quebec

Air Academy, Colorado

*U. S. Military Academy
West Point, New York

U. S. Naval Academy
Annapolis, Maryland

* No answer

REFERENCE WORK

WITHIN

MILITARY SCHOOL

LIBRARIES

by

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Chief, Quartermaster Library

Quartermaster School, U. S. Army

Fort Lee,

Virginia

Reference Work Within Military School Libraries

Dr. William Warner Bishop at one time defined reference work as the service rendered by a librarian in aid of some sort of study, and the reference librarian as an interpreter of library resources. These definitions are practical though not exhaustive. Webster defines service as "supply of needs"; "act or means of supplying some general demand".

We can agree that the primary function of our specific libraries is to support the academic mission of the school to which it is attached. This mission includes more than the formal education of military personnel in their respective fields of interest. It includes the development of doctrine and the preparation and publication of training and informational literature.

This statement of the school mission may be an over-simplification, however, in general it covers the major aspects of school responsibilities.

Three major factors must be considered in any discussion of reference work within our libraries.

a. The relatively short tour of duty and rapid turnover of Staff and Faculty.

b. The size of student body, variety of course, and type of clientele.

c. The resources available, both as to funds and personnel.

Experience has shown that faculty assignments in our service schools are too short to allow a proper indoctrination of the bibliographic and reference service available from the library. This

includes not only what the library can do for the individual, but also the limitations imposed on the library because of its existing staff and budget. While teaching is not the life work of an officer assigned to this duty, we would suppose that this task might be accomplished in an effective manner. It appears, however, that not all who are assigned as instructors have the necessary liking for the job.

The number of students and the courses offered vary in many of our schools. In the Quartermaster School with 12 officer courses operating at the present time, this ranges from a course of three weeks duration with 29 students to one of 32 weeks with 68 students. The majority of courses are for 15 weeks, approximately four months. In addition there are 26 enlisted courses in session. I know all of you are aware of the reference problems this presents to the library staff. While some of these courses are technical in nature and make few demands on the library facilities, the majority require considerable work on the part of the student in addition to the normal study requirements. This places a continuing burden on the library staff.

One of the greatest problems facing the library staff is the element of time. I do not imagine our students are any different from those attending other service schools in our particular category. They all have the unfortunate habit of waiting until the last possible moment to complete their reading or writing assignments. I have no solution for this particular problem unless we can secure the cooperation of the academic departments and the Director of Instruction.

We find that many of the students are lost when they enter the library to do study or research work. While the majority of classes

receive a brief orientation on the library, its facilities and resources, this does not appear to be sufficient. Perhaps we are expecting too much in assuming that students at this stage in their career have at least a minimum working knowledge of a library.

Funds and personnel have important bearings on the reference service we can perform. These areas could well be left for another discussion. Suffice it to say that the military school libraries are a dedicated group and make-do with what they have.

Perhaps one of the most important areas in the discussion of reference work is the availability of publications. The Technical Abstract Bulletin issued by ASTIA, the various Accession Lists issued by the military school libraries, the bibliographies, including specific subject coverage, and those which appear in individual studies and reports, are all examined faithfully and diligently. You know, however, that we all miss items that would be invaluable in our respective fields of reference work. This problem has been discussed at the two previous meetings of this group, and probably will be an item on the agenda for as many times as we meet.

How can we as professional librarians serving a particular segment of the military establishment improve our reference service to the staff, faculty and student body of the military schools?

a. We can show the value of the library to the staff in terms of service rendered, time saved, and the availability of current information.

b. We must strive to achieve a proper status and recognition of the importance a library plays in the academic picture.

c. We must sell "management" on the position the library should have in the overall organization.

d. The library must be made an essential part of the overall curriculum planning within the school. Changes and additions to the school curriculum should be coordinated in the earliest stages with the library staff.

e. Instructors must be informed of new accessions in their area of instruction.

f. Conversely the staff and faculty should inform the library of new publications which come to their attention and which the library may secure for reference use.

g. Continued efforts must be made to secure the cooperation of the academic departments and the Director of Instruction in keeping the library informed as to specific assignments made to the students, most especially as to content and the time factor involved.

h. Finally, the military school librarians as a group must develop some means, within our own organization, or outside if necessary, of securing more complete and adequate coverage on the announcement and availability of new publications within our specific areas of interest.

With these factors in mind, and realising our common objectives, improved reference service within military school libraries, this group may be able to devise ways and means of accomplishing this objective.

COPYRIGHT PRACTICES

IN

MILITARY LIBRARIES

by

ERNEST DE WALD

Librarian

Army Map Service

Washington

DC

Copyright Practices in Military Libraries

My comments regarding copyrighted material do not necessarily pertain to the practices at the Army Map Service Library but to practices and problems as they apparently exist in most libraries.

The copyright law is no doubt clear to all librarians but for purposes of this discussion, it means in brief as follows:

a. Any reproduction in part or whole, without consent, is an infringement.

b. The law makes no distinction between willful or innocent infringement except on penalties.

c. The law does not distinguish whether the unauthorized copy is reproduced with or without the owner's notice of copyright.

d. Equally irrelevant is the question of whether reproduction is a single copy for an individual's use or a printed reproduction of which millions of copies are sold for profit.

e. The duration of copyright on any published work is usually 28 years. This copyright can be extended to an additional 28 years or a total of 56 years. At any rate, after the 56 year period the material falls into what is known as public domain and may be copied without fear of copyright violation. During the copyright period, any reproduction in part or whole, without consent, is in violation of the law.

Most librarians find themselves faced with several forces in regard to the copyright law.

a. The increasing obligation of the librarian to aid in research

b. The non-availability of additional copies

c. Insufficient time to either obtain additional copies or permission to copy

d. The many rapid copying devices which are available

e. The popular belief that the library can provide anything it contains without an obligation to author or publisher

Response to a questionnaire by various groups on copyright practices in libraries reveals the following:

a. Only seven of approximately 100 librarians had a written statement of policy with respect to photocopying of copyrighted works.

b. Less than 10% of the libraries advise or require the user to sign a statement restricting the use of a photocopy.

c. In almost no instance, did a library report that the user was required to sign a statement assuming responsibility for any claims arising out of making a photocopy.

d. Many libraries apparently take refuge in the fact that they copy "for internal use only" which may reduce the problem but does not actually solve it.

e. Those libraries which reported obtaining signed statements from the user felt that while the ultimate legality of

these absolving statements could be argued, there are advantages in having the recipient of photocopy services fully aware of the conditions.

f. Most libraries reported their photocopying as being limited mostly to portions of a published work, e.g., paragraph, article or chapter.

g. A few libraries reported no copying without consent of the copyright holder.

It is apparent that there is considerable activity in the photocopying of copyrighted material. There seems to be little consistency of pattern by the individual libraries. Although the question is increasingly irksome and in need of clarification, there is no strong evidence that the practices now employed have given rise to complaints from copyright owners. I believe publishers look with disfavor on copying by libraries of copyrighted material no matter how good the motive. The copyright notice is often not included in the photocopy. This leads to further infringement by others that would not be aware of the copyright.

Apparently it is felt by various groups that there is still time to develop recommended practices before the situation gets out of hand. As a result several library committees as well as a New York law firm (aided by the Council of Library Resources, Inc.) are making additional studies of the problems of photocopying in libraries.

In my mind there seems to be room for all concerned to consider placing photocopying in a category known as "Fair Use". These might be some of the "Fair Use" rules:

a. Copy only for internal use as additional loan copies

b. Always reproduce the copyright notice

c. Never photocopy quantities for distribution

d. Photocopy selective parts of a published work for use of a research specialist

e. Publicize the essentials of copyright rules to all library customers.

D I V I S I O N A L M E E T I N G

R E A D E R S S E R V I C E S

P A N E L

D I S C U S S I O N S

Moderator

ERNEST DE WALD

Librarian

Army Map Service

Washington

DC

Readers Services Divisional Meeting

After presentation of the paper by Beth Simpson the discussions covered briefly the subject of Library orientation. It was the general consensus of opinion among the group that orientation is best given to students, not immediately upon their arrival at the school, but several weeks after their assignment. The use of brief library exercises, pertinent to the courses, seem to be generally well received. Orientation of academic instructions was recommended as an opening wedge to making a place for the library in the school's program of instruction.

Following the presentation by James J. Slattery a brief discussion was centered on the similarity of basic elements of reference problems at Fort Sam Houston and Fort Lee. It seemed apparent that reference problems, although minor differences occur, embrace the same principles and face generally the same problems within military schools. The matter of evening hours was discussed. Mr. Charles Knapp of the Industrial College of the Armed Forces, Washington, DC, commented that at his Library the doors are open at all hours, though there is no staff member present to give service after regular working hours. In connection with the discussions on reference problems, Miss Florine Oltman, Air University, suggested that more complete information, such as contract numbers of technical reports, sources of specific documentation, be included in accession lists. It was agreed

that some notice of this need should appear in the Bulletin of the Military Library Division of SLA.

The copyright discussions revealed that most librarians did some type of reproducing without formal permission. This is largely done for internal use or for the use of a specific researcher. Some hope was expressed on the present studies of the copyright laws and problems by various elements.

Participants at this panel felt generally that the papers and discussions were very good. The size and complexion of the group made for much audience participation. Discussions after each paper seemed to be more practical than discussions after a series of papers. This panel wanted to go on record in recommending to future program planners more group participation in smaller groups as opposed to formal papers presented by individuals.

TECHNICAL PROCESSES

Introduction, Friday, 9 October 1959, 0930 Hours

Oliver T. Field, Air University Library, Moderator

Acquisitions seems to be the continuing problem area in military librarianship. In evidence of this, we have the audience at the panel on this subject, an overwhelming majority of the participants in this Workshop.

Military librarians operate under three handicaps: the first is the Federal procurement regulations. Although few of us would fail to agree that these have sound cause for existing, we would probably all agree that they hamper us in several ways in our attempt to give the kind of service we would like to give. The second handicap is local procurement practices which sometimes actually increase the cost of materials through delays and duplications.

And last there is the endless paperwork. The bigger the activity, the more paper seems to be involved in its operation, and I suppose the Federal government is the greatest business in our country today. I would like to give you this off-the-cuff translation of a jingle popular among German government workers, whose government is famous for paperwork:

From the cradle to the grave
Endlessly with forms I slave.

U. S. AIR FORCE ACADEMY LIBRARY

ACQUISITION SYSTEM

by

GEORGE V. FAGAN
Lt Colonel, USAF

Director of Libraries

United States Air Force Academy

Colorado

U. S. Air Force Academy Library Acquisition System

Most Air Force library acquisition and procurement are done on a centralized basis. Air Force Regulations 212-1 and 212-3 spell out in detail the guidelines used in the normal acquisition and procurement of materials. A later speaker, Mr. Hetrick, will discuss central procurement at greater length. Headquarters USAF has granted exceptions to the cited regulations to specific libraries. Among these exempted libraries are those of Air University, Air Research and Development, and the Air Force Academy.

This morning, I plan to tell you how the Air Force Academy Library acquisition system works. Before I begin, however, let me remind you that the millennium has not yet arrived. The system we employ is still largely empirical and is fraught with imperfections which often drive staff members to the brink of nervous collapse. The other day, I came across an old report of Air University's procurement difficulties a number of years ago when Jerry Orne was Director. The report stated that the staff found that the acquisition of library materials was a "tortuous road filled with obstacles of red tape." I am positive that all here agree that the simile is still apropos.

When the Air Force Academy was established in 1954, it was necessary to start everything from scratch. Broad policy statements had been drawn up in the years between 1946 and 1954, but each academic department and operational agency of the Academy had to pitch in and translate the policy into action. For the Library, this meant setting into motion a chain of events, some of which did not always fall into the proper sequence. In retrospect, we had to: formulate a lucid mission statement; establish an internal library committee; draw up a book selection policy; set up machinery to select and acquire materials; test our program by comparison with others used in similar type libraries; evaluate our program ourselves; and submit to evaluation of

our program by outsiders (Library Advisory Group, Board of Visitors, and the Accreditation Committee of the North Central Association of Colleges and Secondary Schools). We would like to share our experiences of the past four years with other military libraries. Perhaps some of our ideas may have practical application in your libraries.

In order to provide the materials necessary to support the overall educational aims of the Air Force Academy, our book selection was and is being conducted in two major phases: 1) To acquire a collection of basic materials to provide a well balanced and well rounded collection and (2) to broaden and strengthen the collection with an emphasis on specific subjects pertinent to the goal of the Academy i.e. military arts and sciences, leadership, administration and management. The aim of our book selection policy for the library is to acquire the best possible publications affording general treatment in all fields of knowledge covered in a basic liberal arts and general academic curriculum. The following book selection priorities are in effect:

Priority 1. General reference works and reference books concerned with all aspects of the curriculum.

Priority 2. Library materials specifically requested by professors and heads of the academic departments as needed to sustain the curriculum.

Priority 3. Materials necessary to support extra curricular activities at the Academy, as requested by the officers concerned.

Priority 4. Recreational reading materials.

In general a rating of 1 to 10 is used to order all books placed on reserve by specific departments. As a working rule, the Library does not purchase expensive volumes or sets for which there is little demand. Instead, these items are borrowed on interlibrary loan.

Experience has shown that the best results in book selection can be achieved

only through careful planning and sustained teamwork between the Faculty and the Library staff. Although most members of the Faculty are subject matter specialists, studies have been published by experts in librarianship which have shown that unless the members of a library staff participate, the book selection will be uneven and sporadic.

In actual book selection, the Library staff at the Air Force Academy works in close cooperation with members of the Faculty. Faculty members recommend collateral reference and research data in their respective fields. They also consult with Library personnel to identify areas where augmentation is desirable. We have found that a centralized book selection and searching unit eliminates duplicated effort and speeds up order processing. The Library has on its staff two professional book selection librarians who select materials for the collection in their respective fields -- Social Sciences and Humanities and Science and Technology. As Director of Libraries, I have the responsibility of seeing that all fields are covered. I must also insure that the funds allocated to the Library for the purchase of library materials are used both wisely and economically.

Tools used in book selection are varied. Basic general bibliographic tools are used. Although specific subject bibliographies are used, we avoid blind acceptance of "standard" reading lists. Since foreign literature often provides much better coverage in fields of strong interest at the Academy, valuable studies of foreign origin are often utilized.

In order to provide all of the necessary materials and to avoid duplication of materials in the Library, all items are identified accurately before the order is initiated. Since the Library of Congress provides author and subject catalog cards the Library uses its identifying entry. This entry is not always used by the book trade so extreme care is necessary in the

interpretation of trade information. In effect, the book selection librarians establish the main entry.

Certain steps are followed in ordering books and other library materials. When the decision is made to obtain a book, a multiple order form is prepared, giving as much of the essential information as is then available. This and other order slips are assembled in alphabetical order for the development of complete information describing the items. These order slips are then checked against the order files and the public and official catalogs to determine that the books are not already owned by the Library or on order.

Long ago we hit upon a scheme which has been of mutual benefit to both the Library and Procurement. Since the book trade is organized chiefly along specialized lines, we developed a category system. In this manner, we in the Library are able to guide the Procurement people to the proper vendors instead of letting them operate on a hit and miss basis. Over the past four fiscal years the category listing has been refined. Each year, the Library and Procurement agree on suggested vendors for each category based upon specialty and quality of service rendered. Blanket purchase authority contracts are given to vendors in each of the major categories. Individual purchase orders are sent to vendors listed in appropriate categories. In all instances the Library places the appropriate category symbol on the purchase requests sent to Procurement for order action. Our category classification for Fiscal Year 1960 is:

Category I Domestic "In-Print" -- Blanket purchase authority and individual purchase orders.

Category II Domestic and Foreign "Out-of-Print" -- Blanket purchase authority and individual purchase orders.

Category III-A British "In-Print" -- Blanket purchase authority.

Category III-B Other Foreign "In-Print" - Blanket purchase authority.

Category IV Foreign "Out-of-Print" - Category IV has been incorporated into Category VI and is used by the library only for cross-reference purposes.

Category V Newspapers and Periodicals

Category V-A Domestic Periodicals

Category V-B Foreign Newspapers and Periodicals

Category V-C Domestic Newspapers

Category V-D Direct Order to Publisher

Category VI-A U. S. Government "In-Print" -- Superintendent of Documents U. S. Government Printing Office Washington 25, D. C. (sole source)

Category VI B U. S. Government "Out of Print"

Category VII Microcards

Category VIII Microfilm

Category IX Back Files - Periodicals

Category X Primarily this category will include those publishers who will not grant discounts to jobbers or dealers and those whose publications can be obtained only by direct purchase Included are historical scientific educational and research societies, as well as non-profit organizations which publish as a service rather than as a business. This designation will be best also for small publishers not well known in the book trade. In the effort to expedite acquisition to reduce expenses, and to eliminate paper work we combine low-cost items in this category on one purchase request. Whenever possible, a single vendor is suggested but frequently low cost items can be obtained only by direct order to the publisher. Whenever the publisher's street address appears on the purchase request, it should also be included on the purchase order to eliminate further searching

on the part of the vendor.

Category XX This category is used to specify sources for materials that, in themselves, might be in any of the other categories but still require segregation by virtue of being out of print or difficult foreign publications. This area includes offerings from dealers' catalogs, sources with strong specialties, and large orders from a single publisher. If a dealer offers such materials needed by the Library, we list the desired items from his catalog in a letter of inquiry asking that he advise us immediately which items can be shipped on receipt of our order. This letter is carefully worded to avoid being construed as a firm order. Upon confirmation of availability, a verbatim purchase request and purchase order are prepared by the Library and Procurement for immediate dispatch. It is necessary to back up each confirmation with a prompt order and to insist that the vendor meet his obligations also in order to assure a workable two-way agreement. Here again, emphasis is placed on the importance of following the instructions given on the purchase request.

Multiple order forms are given to a typist for the preparation of purchase requests. The completed and authorized purchase requests are then forwarded to the Academy Procurement Office for continuing purchase action. Forms used by the Library for ordering books and related materials include: Multiple Book Order Form; Request for Purchase, AF Form 9; Receiving Report, DD Form 1155 -- used for complete receipt or for first partial; Receiving Report DD Form 250 -- used for partial shipments.

Files maintained in the Acquisitions Division of the Library include: books on order or received; outstanding purchase requests; completed purchase requests outstanding blanket purchase orders (kept alphabetically by company) outstanding individual purchase orders (a numerical file) completed

purchase orders. A number of the files are weeded regularly as the fiscal year progresses, and the records are put into an inactive status awaiting disposition under appropriate regulations governing the Air Force Records Management Program.

The ordering of Library of Congress cards requires a separate procedure. One slip in the multiple order form is sent to the Library of Congress Card Division. Each printed card has been given its own number. Ninety-five per cent of the cards ordered by the Library are ordered by these numbers. The remaining cards are supplied by the Card Division using the data furnished by the Library. If it is doubtful that a book may be located for purchase, the ordering of cards is delayed until receipt of the book.

The handling of gifts is an important function of the Acquisitions Division also. Gift items are acknowledged in writing by the office of the Director and sent to the Special Collections Branch of the Public Services Division to be entered in the gift register and for preparation of appropriate book plates. They are then forwarded to the Acquisitions Division for ordering of Library of Congress cards, as required, and then sent to the Cataloging Division for processing into the collection. Order slips for gift items are prepared and inserted in the order file to aid in checking for duplications.

The same multiple order forms and receiving forms are used for ordering and receiving newspapers and periodicals, except that a receiving report is not required for current newspaper and periodical subscriptions. Notification of receipt of the first copy is sent to Procurement and to Accounting and Finance. Each periodical issue is recorded in a Kardex checking file upon arrival, thus providing an up-to-date record of delivery.

In accordance with a recent change to AFR 212-3, publications of the Superintendent of Documents, U. S. Government Printing Office, are ordered

in the same manner as other library materials.

Receiving reports are an essential part of all Air Force procurement. Receiving reports are prepared upon the arrival of all materials. These reports must agree with the orders, invoices, and materials as they constitute the authority for payment of invoices. Receiving reports are prepared within twenty-four hours of receipt of materials with the appropriate purchase orders invoices, or shipping tickets giving the actual costs.

A summary of purchase request and receiving report data is submitted weekly to the Director of Libraries.

The primary characteristic of a good academic library is its complete identification with its own institution. The measure of its excellence is the extent to which its resources and services support the institution's objectives. We feel that the Air Force Academy Library is well on the way to attaining this goal. After nearly four and one-half years of operation, we have built up our holdings from zero to a well-rounded and well-balanced collection of almost 100,000 items. Our Library is designed to hold, ultimately, 250,000 volumes, including an extensive and comprehensive collection of aeronautical materials.

ACQUISITIONS OF UNPUBLISHED GOVERNMENT MATERIAL (NAVY)

by

William H. Plant

Engineering Information Branch

Bureau of Aeronautics

(Department of the Navy)

Washington, D.C.

ACQUISITIONS OF UNPUBLISHED GOVERNMENT MATERIAL (NAVY)

It is said that the shortest doctoral dissertation ever accepted by a British university was one entitled "The Species of Snakes in Ireland" which consisted of only two sentences: "There are no snakes in Ireland. St. Patrick drove them all away."

A statement on Navy acquisitions systems for technical reports might be equally brief - "There is no Navy acquisitions system. We just write letters"

Since the title of this session is "Unpublished Government Material", I will deal principally with technical reports acquisitions.

To adequately account for the necessary procedures in Navy acquisitions, a brief statement of the general organization of the Navy might lead to easier understanding of the problems involved. The Department of the Navy is organized into seven "Bureaus" and two "Offices" which give technical support to the operational elements of the naval establishment, both Fleet and shore-based. The Bureaus and Offices in turn, each have varying numbers of field installations, and each Bureau and Office performs a varying amount of supporting research, development, test, and evaluation through contracts with industrial concerns and academic institutions. All of these organizations produce technical reports which become objects of the acquisitions procedures of other military services, facilities, and contractors. Unfortunately, the various Bureaus and Offices do not have a common system or procedure which can be offered, even partially, to those who wish to acquire technical reports.

The one unifying control factor in the acquisition of Navy technical reports is the Navy security manual (OPNAV Instruction 5510.1.B) which specifies two qualifications which must be met by potential acquirers of these reports; First, a facility and personal security clearance, which is generally a straightforward, clearly cut matter of "yes" or "no"; and second,

a "need-to-know", which may be a very vague determination, ranging from a strictly interpreted exact requirement based on a specific project, contract, or study, to a very loosely interpreted requirement based on a generalized capability to produce in a broad field of endeavor.

Further controls are imposed by the degree of freedom which is allowed by the parent Bureaus and Offices to their respective field installations and contractors in their dissemination and distribution of reports.

To get down to cases, the safest, surest initial step in the acquisition of Navy-generated technical reports is to apply direct to the parent Bureau or Office for copies of the report, and to be guided in future requests by the results of this initial application. In all cases, acquisitions requests should be directed through the chain of command, or through proper channels, namely, cognizant technical project officers, in case of military organizations under the bureau level, and via inspecting officers and technically cognizant project officers in the case of contractor requests. This is for requisite security clearances and certification of "need-to-know".

The question of release of proprietary or privileged information included in reports is not important insofar as military acquisitions requests are concerned where no further dissemination is envisioned. Release of such information to private sources must necessarily be made only with the approval of the organization originating the material. The law on unauthorized disclosure of proprietary material imposes rather harsh penalties for such release: loss of position, $2000.00 fine and a one year jail sentence, therefore great care must be exercised in gaining proper approval for such release.

To summarize the problem; if proper channels are employed in pursuing the acquisitions of technical reports, there is no real problem presented in the acquisition of Navy-generated technical reports.

TECHNICAL PROCESSES:

PANEL ON PUBLICATIONS ACQUISITIONS SYSTEMS IN MILITARY SERVICES

ACQUISITION OF AIR FORCE TECHNICAL DOCUMENTS

by

JOHN M. HETRICK

Chief, Technical Information and

Intelligence Division

Air Force Office of Scientific Research

Washington 25, D. C.

ACQUISITION OF AIR FORCE TECHNICAL DOCUMENTS

Mr. Chairman, Ladies and Gentlemen. Col. Fagin, of the Air Academy has only a limited requirement for technical reports. He has asked me, as a representative of an Air Force research organization producing reports and also requiring them to perform its research mission, to talk briefly on this subject.

First, I'd like to try to explain briefly about the Air Force or Air Research and Development Command documentary report numbering and distribution system. I have heard it said that it is easier to get a Russian report than an Air Force report. This should not be the case, certainly if the documentation factors on a report are understood.

The Air Research and Development Command (of which the Air Force Office of Scientific Research is the Center whose mission is exclusively basic research), probably is responsible for over 90% of all Air Force documentary reports, and certainly of research and development reports. We think the ARDC documenting and reporting system, as set forth in the ARDC Manual 5-1, PREPARATION OF ARDC TECHNICAL DOCUMENTARY REPORTS, is about the best any Government activity has. Each of the eleven ARDC Centers or report generating activities is responsible for documenting and numbering its own reports prior to publication and distribution. The numbering system works like this: the initials of the activity - WADC, AFOSR, AFMTD, ARDC, etc. - followed by TN or TR (TN to indicate a technical note covering a phase of the research; TR, technical report, a survey of all the research on a completed contract or task). Following this element of the report number is the calendar year and sequential number of the report. For instance, the 175th technical note issued by AFOSR during 1959 would be numbered AFOSR TN-59-175.

If the number of the report is not known or, for some reason does not appear, there is the contract or project number. Each contracting activity has its own station number as well as its individual project numbers. Anyone work-

ing much with reports will soon notice that in all contract reports issued by the Air Force Missile Development Center (AFMDC), for instance, the contract number begins with the station number 29(600). I have prepared a list of the station numbers of the priciple report generating activities.(1) Air Force project and system numbers assigned the various centers of ARDC are available from Headquarters ARDC as are the R & D Project Cards (DD 613) which describe each project, task and sub-task.

Further, all ARDC reports with very few exceptions go to ASTIA (and the unclassified ones to OTS also). We depend on ASTIA for all secondary distribution. I don't know of any Center that maintains an inventory of reports for secondary distribution. Occasionally, if we have an extra copy, and somebody wnts it, we mail it to them, but this is not the rule. We do maintain at AFOSR a complete file of our own reports, and if you have an urgent requirement, we will mail on loan individual copies which you can be using while awaiting a retention copy from ASTIA.

Another source for AFOSR and, indeed a lot of Air Force unclassified reports, and one most frequently overlooked, is your open literature sources. Our contractors and in-house research scientists are encouraged to publish their findings in the open literature of their specialties. As a further incentive in this direction we pay any page costs. We receive requests frequently for reports which appear in open literature sources available in most libraries.

Here is another idea, and one which might save you considerable trouble. If you receive a report and know that the research contained in it is in line with, or of real interest to one of your investigators, write to the responsible Air Force activity and ask to be placed on the basic or initial distribution list. It is far simpler and less expensive all around if once you have determined that the findings of a research project or contract are of interest

(1) See Attachment

to you, for you to receive the reports as they are first distributed. Getting on the basic distribution list saves you from searching and writing letters, saves ASTIA, and saves the responsible activity. If your requirement is not obvious from the name of your organization, write a sentence or so describing your need. Research monitors and researchers are happy to know of and distribute reports to others interested in their research tasks.

I have now run over the time allotted Col. Fagin and me, but let me briefly go over the important identifying information to look for and include when requesting Air Force research and development reports:

1) Report number assigned by the Air Force agency.

2) Report number assigned by the originating agency.

3) ASTIA document number (AD).

4) Contract number (also project and task numbers).

5) Name of originating agency.

6) Name of the sponsoring Air Force agency (particularly if AF report number is not given).

7) Security classification.

You can also expedite your request when your identifying information is scanty by indicating how the requested material came to your attention (e.g. document in which cited, individual wanting report, etc.), and also by indicating any past experience in trying to obtain the material, as for example activities which could not identify or supply the report (such as ASTIA), giving the reason. And finally, if ASTIA cannot supply or identify a report you are looking for and you can't identify the responsible Air Force activity, write to Headquarters ARDC, Washington 25, D.C., or direct to the contractor if known (as a last resort).

CHIEF R & D CONTRACTING STATION NUMBERS

Description	Number
Maxwell AFB, Ala	01-600
Gadsden AF Depot, Gadsden, Ala	01-608
Sacramento AMA, Calif	04-606
AFFTC, Edwards AFB, Calif	04-611
AFSWD, Inglewood, Calif	04-645 & 04-647
AFMTC, Patrick AFB, Fla	08-169 & 08-606
AFAC, Eglin AFB, Fla	08-616
APGC, Eglin AFB, Fla	08-603 & 08-635
Hq ARDC, Andrews AFB, Washington 25, D.C.	18-600
AFOSR, Washington 25, D.C.	18-600 & 18-603 & 49-638
AFCRC, L.G. Hanscom Field, Mass	19-122 & 19-604
AFMDC, Holloman AFB, N.M.	29-600
AFSWC, Kirtland AFB, N.M.	29-601
RADC, Rome, N.Y.	28-099 & 30-602
Rome AF Depot, Rome, N.Y.	30-120 & 30-635
Hq AMC, Wright-Patterson AFB, O.	33-038 & 33-604 & 33-600
Hq WADC, Wright-Patterson AFB, O.	33-096 & 33-601 & 33-616
AEDC, Tullahoma, Tenn	40-600
AFPRTRC, Lackland AFB, Texas	41-417 & 41-615 & 41-617 & 41-653
San Antonio R&D Procurement, Texas	41-657
European Office, Hq ARDC, Andrews AFB, Washington 25, D.C.	61-052 & 61-514

Summary

ACQUISITION OF BOOKS IN ARMY LIBRARIES

Margrett B. Zenich, White Sands Missile Range

Procurement of publications is a function of the installation contracting officer: committing, obligating, expending funds for purchases. Examining procurement documents supporting payments are functions of the Finance and Accounting Office. These functions are so interrelated with internal procurement functions of the Technical Library that it is necessary for the acquisitions personnel to have knowledge of procurement policies and procedures which govern the activities of the Purchasing and Contracting Office and the Finance and Accounting Office.

The following are the most commonly met problems of procurement:

1. Cancellations too frequent.
2. No direct contact with vendor except in one case.
3. Partial shipments. Cannot receive partial shipment into the library collection until shipment for one line item completed. May wait for months before a publication consisting of sets can be made available to readers or requestor.
4. Procuring Out of Print materials.
5. Delay in orders due to slow action of Purchasing and Contracting.

Procurement of anything through Purchasing and Contracting and the regulations as they stand today, is cumbersome, slow, and expensive. The three services should try to formulate a document especially for library procurement

and have it approved and made effective. The following letter, which was received in the White Sands Missile Range Library shows this point most clearly.

C O M M E N T S

O N T H E

A C Q U I S I T I O N S S Y S T E M

by

INGRID E. VOSS

NEW YORK NAVAL SHIPYARD

MATERIAL LABORATORY LIBRARY

Brooklyn,

New York

Comments on the Acquisitions System

During the less than three years that we librarians at the Material Laboratory have been working together, a first experience for all of us as Military Librarians, it has seemed to us that the Acquisitions program has consumed far too much time and thought. From our point of view, there were two reasons for our difficulties: first, the lack of a manual containing the rules and regulations of the Armed Services Procurement Manual which applied to the procurement of library materials; secondly, the regulations themselves which tend to hamper the prompt acquisition of material.

The need for a manual was pointed out by Miss Canova at the Naval Library Conference in 1953, in her talk entitled "Acquisition of Official Publications in a Field Establishment". We at MATLAB can testify to the seriousness of that need for we spent a large part of our first year digging out the information that should have been immediately available to us in a manual. After all, this information can not be acquired in a library school, nor even through experience in a non-military library. I was well aware of the advantages of having a manual, for my previous experience had been in a government library, which was part of a highly organized system, complete with a manual, and a director in Washington, whose office kept us informed of any changes in the regulations affecting the library. The time needed to acquire the information necessary to being effective in an organization can be cut down immeasurably if a manual is available.

Presented at the Military Librarian's Workshop, 1959 at U.S. Naval Postgraduate School, Monterey, California

The effects of the regulations themselves are reflected in the excessive delays encountered in obtaining material ordered. There are three areas in which it would be possible to reduce delays were the regulations revised to permit it.

First of all, the time lag between date of the library request and the date of library receipt of material seems excessive. Surely there is no good reason why our library, located in Brooklyn, should have to wait four to six weeks to receive a current, in-print book published by McGraw-Hill, located directly across the river, in Manhattan. Yet when I checked the time lag on 221 domestic, in-print items, I found the following to be true:

More than 10 days were required for the receipt of 96% of the items

" " 30 days " " " " " " 84% " " "

" " 50 days " " " " " " 39% " " "

For a short period of six and a half months, we were authorized to order books directly from a dealer under a blanket purchase order. Note the reduction in time lag under this procedure:

More than 10 days were required for the receipt of 67% of the items

" " 30 days " " " " " " 8% " " "

All items had been acquired within 45 days.

Despite the advantage of book procurement under the BPO system, the decision was made by the Procurement Division to revert to the former system. It seems as if the time lag on the bulk of our requests will again be 30 days or more.

Our second problem is connected with the handling of periodical subscriptions. The renewal of subscriptions always seems to entail countless errors, especially when the agent is changed. The results are breaks in subscriptions with needless delays in receipt of issues, missing issues, or publication of orders. In one instance the Library requested the renewal of

a list of some 75 titles for the fiscal year period. However, the list was renewed for the calendar year period. As a result, the library received, at considerable cost, a duplicate set of the titles for a six month period. By the time the Library memo requesting correction of the error had gone through channels, and a change order had reached the publisher, at least 4 or 5 months had elapsed. Government libraries sorely need the benefit that can be derived from the continuity of service provided by a standing order with one subscription agency.

The third area in which there is unnecessary delay is that of claiming missing issues. Instead of forms in triplicate being prepared by the Requisitions Branch for the signature of the Head of the Industrial Division, after the list of missing issues has been received from the Library, all that is needed is a simple post card form to be filled out by the Library, and sent directly to the publisher.

Since we have found the clumsiness of the "system" especially irksome, I have been very interested in learning how other government libraries function within the framework of the system. Are they satisfied with the system? If not, what changes do they wish to see. Last spring, I queried a number of libraries, government but non-military, regarding their book ordering system. One of the librarians sent me a copy of a chart showing the results of a survey she had made some time before of the book ordering procedures of nine libraries in the Washington area. Under a column headed "Comments", three of these nine libraries indicated they were "Satisfied". In each case, the libraries had authority to place the book orders directly with a dealer or publisher, and the average time lag between date of order and date of receipt was one week or less. Comments of five libraries varied from "Could be better" to "Most unhappy". Each of these libraries placed their requests through channels, and the time lag was in the four to six weeks range.

Judging from the 21 replies received to a questionnaire on the procurement of books and periodicals, sent to members of the Council of Librarians, East Coast Naval Laboratories, the situation within these libraries is somewhat the same. The answers to the request for comments on procurement procedures, fall into 4 groups. Four members of one group, Group A, stated that they were satisfied with the present system. The eleven members in Group B took a middle-of-the-road position; they are by no means satisfied, for they all mention improvements they would like to see. However, their comments are made with calm. Not so the four members in Group C. The changes they suggest, although more or less the same as those suggested by members in Group B, are suggested with warmth of feeling. The remaining two members in Group D made no comments.

What specifically do the 15 members in Groups B and C think should be changed? 7 of the members indicated dissatisfaction with the book procurement system. 5 of these 7 specifically suggested the Blanket Purchase Order as the means for improving the situation. Of the 14 members who made no comment on the need for this improvement, 8 already operate under a BPO system and presumably find that system satisfactory. None of the members in Group C operates under a BPO.

Dissatisfaction with the procurement of periodicals was expressed by 8 members. They feel there is need for a system that will assure continuity of service, and will eliminate the confusion which so often results from changing subscription agents. The solution suggested by 7 of these 8 members is the ordering of periodicals on a Standing Order Till Forbidden basis.

It seems therefore, that if librarians are dissatisfied with the present system for the acquisition of books and periodicals, their dissatisfaction stems from the same problems. If, on the other hand, they are satisfied

with the system, it may be because optimum procurement procedures have been established to meet some of the problems peculiar to the procurement of library materials. In these cases the credit is no doubt due the librarian who has taken the initiative in achieving the optimum procedures within the system, as well as the Procurement Officer who was cooperative.

One librarian who answered the BCNL questionnaire, made this comment, "Procurement procedures currently in operation ... appear to be satisfactory. This I believe is helped immeasurably by the cordial relationship existing between the librarian and the Supply Division ...".

The NEW YORK TIMES recently carried an article on Dr. Thaler of ONR which I found interesting because it illustrates this point. "Dr. Thaler acknowledges that the 'system' ... has its shortcomings but he is both philosophical and practical about it ... 'The key is to recognize the bottlenecks and find ways to circumvent them ... you get to realize that it's all in personal contacts. You can get the deed to the Washington monument if you know the right people in government'."

Of course he is right, for interpersonal relations are basic in any enterprise. But in the case of the Acquisitions System, I feel it's unfortunate that its smooth operation depends to such a large extent on the success of personal contact, since such success is often a matter of chance; and furthermore, that the effect of the success of one librarian in this area is so limited.

It should not be necessary for each librarian at each installation to expend time and effort in securing the most effective acquisitions procedures. The operation of the Acquisitions system in the most effective way should be done as a matter of course, not as a favor granted to an individual librarian.

The comments on one ECML reply to the questionnaire contained this statement which I think sums up the matter very well: "It seems to me, that in general, government regulations are promulgated with good intentions and over all needs in view, which are totally unrealistic in their application to libraries. If lobbying at high levels were a possible means of getting some of these regulations amended so far as their application to libraries is concerned, much practical benefit would ensue. Perhaps this is one instance where concrete recommendations (agreed upon by a majority vote at an ECML meeting) could be passed on to the Senior Scientist Council ...". I agree with the idea whole-heartedly, except that I feel such action should be initiated by a larger group, possibly this group, since the larger a group we are, the better our chance of success.

But is there a need for greater speed and efficiency in the Acquisitions System? Is the librarian setting unnecessarily high standards if he holds it to be his responsibility to acquire material in a minimum of time? Are the delays in the acquisition of library books and periodicals of sufficient consequence to warrant taking steps to correct them? What are the needs of our clientele? Does it really matter to them whether a book is received in 15 or 50 days? Does it matter to anyone but the librarian that the library always loses a few periodical issues at renewal time?

One librarian says, "The people served by this library are aware of the numerous delays which can occur in government procurement and appear to accept the delays philosophically". Again quoting Dr. Thaler from the story in the NEW YORK TIMES: "...one of the things I leaned on (in Project Tepee) was a 1954 booklet put out by the British DSIR that some how turned up on my desk three years late ...". But he does not protest having received this very important booklet three years late - at least it is not recorded in the article.

This point of view, that delays in government procurement are inevitable and to be accepted, seems prevalent. After all, we muddle along; we eventually receive the material; nothing catastrophic happens, and the Russians precede us to the moon.

It seems to me it is our responsibility to combat inertia within the relatively small area which is our province. The compilation of the Manual on Procurement might be one contribution which we as a group can make. We can not, of course, either singly or as a group, attempt to effect changes in regulations governing the Acquisitions system, since were we to do so, we would be acting without authority from our management. But we can, as a group, present management with a clear picture of the problems arising under the present system, with suggested standards to be met by the acquisitions system. In doing this we will have discharged the responsibility which is ours to acquire material in a minimum of time to fill the needs of our clientele, and we may have initiated action which will result in those changes in the regulations from which "much practical benefit" will ensue.

AVAILABILITY OF TRANSLATIONS

OF

FOREIGN SCIENTIFIC AND TECHNICAL REPORTS

by

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Availability of Translations of Foreign Scientific and Technical Research

As a result of the demand which mushroomed after Sputnik I, several programs for translation of foreign language scientific and technical publications have been established. Because of the very high cost these programs are in many cases sponsored, subsidized or otherwise assisted by various official or academic organizations. The needs of scientists and engineers for translated material appear currently to be not quite adequately through the programs now established.

The acquisition of translations probably is a two-fold problem: (1) how to get a translation of a specific title the scientist needs, and (2) how to get the translations already available in a particular subject field to the scientist.

For the librarian interested in learning what some of the translation programs are, as well as what is available in the way of translation services and sources, the study made by the Georgia Chapter of the Special Libraries Association is an invaluable guide. The 60-page volume, entitled "Translators and Translations: Services and Sources", was edited by Frances E. Kaiser of Price Gilbert Memorial Library of Georgia Institute of Technology and issued a few months ago by S.L.A. It is well worth the $2.50 it costs. Part I is a directory of translators, lists the address, telephone number, languages, subject specialities, rates, and other pertinent information about 154 translators in the U. S. Part II, Pools of Translations, describes size and scope, languages, subjects, services, sources where indexed, of 42 translation pools throughout the world. Part III, Bibliographies of Translations, cites in detail 83 references to published bibliographies of

translations. Here in one compact booklet is almost all the information the acquisitions and reference librarians need to have when pondering many of the problems connected with translator services and translation sources.

In addition to the S. L. A. project, there are two sources of listings of translations: (1) "Technical Translations" issued by OTS and (2) CIA's "Consolidated Translation Survey". These, I believe are two of the most important tools in the area of report translations with which the acquisitions and reference librarians should be acquainted. The former may be purchased on the open market, the latter is available for official use only.

In January 1959 the Office of Technical Services published its first issue of "Technical Translations", a periodical which lists and abstracts "translated technical literature available from the Office of Technical Services, the Library of Congress, the Special Libraries Association, cooperating foreign governments, commercial translations and publishers, universities and other sources". This publication superseded the S.L.A. "Translation Monthly" which ceased publication with the December 1958 issue. "Technical Translations", or "TT" as it is designated by those who work closely with it, lists translations by broad subject categories, giving as complete bibliographic information as is made available to OTS with information regarding price and from whom to order. Other sections included in each issue are "Book Reviews", "Translations in Process", "Periodicals Translated Cover-to-Cover", and various excellent indexes. The number of technical periodicals now being translated cover-to-cover is 75, of which about 36 are in mathematics and physics, 15 in chemistry and 10 in medicine.

"Consolidated Translations Survey" is prepared by Central Intelligence Agency from lists received through the cooperation of U. S. government agencies, and includes translations of such agencies, private industry, universities, research institutions and commercial organizations. The source from which a translation is available is given although no prices are listed. The first section of the survey is arranged by geographic area with one or several of the following subheads: economic-political-military-geographic-sociological-biographical. The second section consists of a listing of scientific translations as a group, regardless of geographic area, in broad subject categories. Since all but the economic material is now listed in OTS's "Technical Translations" this unclassified survey has become less valuable to the scientific and technical library. In addition, the lack of indexes greatly curtails its usefulness. A classified edition which is issued separately is more important to the technical librarian, but here again, patterned on the unclassified edition, the lack of adequate indexes makes the individual issues difficult to use.

These publications, the S.L.A. Georgia project study, OTS Technical Translations, and the CIA Consolidated Translation Surveys can be used as basic tools in locating bibliographic sources of translations, an available translation of a particular title, or in selecting translations in a specialized subject field.

But there is still another consideration. Simply knowing sources is not the complete answer on how to get the translation to the ultimate user. In spite of efforts taken by the government and other organizations to make translations, and listings of translations, readily available to the scientist

an engineer, those available do not yet seem to be used as extensively as might be hoped for. At least this is the experience of the Bureau of Ordnance Technical Library.

The scientist is often reluctant to ask for, or the librarian to purchase, a translation costing in the neighborhood of $20.00 a page. The librarian in selecting acquisitions in his subject field wants to be sure a $200.00 or $300.00 publication would be of real value to his clientele if purchased for the collection.

We would like to be able to borrow translations for review prior to purchase. It is true that many of the translations which have been completed and listed are available for review at various centers. But translations available for review at a far, or near, center are not translations available to the scientist in his workshop. Do the military libraries need a more active program of exploitation of those translations now available? Is it enough to direct the scientist to a copy he can review? Does any military library have sufficient funds to acquire without careful review?

If there were a collection from which the military libraries could borrow translations, those of possible interest could be reviewed by the librarian with the assistance of the scientist as desired. It would then be possible for each of the military technical libraries to institute an active program for selection and acquisition of the pertinent translated foreign literature in his subject field.

THE NEED-TO-KNOW CONCEPT

by

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The Need-To-Know Concept

It is the purpose here to discuss briefly the principal of determining need-to-know on a subject matter basis. All of us are fully aware of the requirements of security clearances, facility clearances, and the need for classified information in connection with classified projects. When we add to these elements the additional requirement of specified subject fields, the system for determining need-to-know becomes complicated and indeed questionable.

Most of you are aquainted with the Field-of-Interest Register (FOIR) used by ASTIA for making a subject matter certification in connection with need-to-know requirements. This Field-of-Interest Register is divided into 33 main divisions and some 240 subordinate sections. All classified information in ASTIA is categorized into these subject fields and users are asked to make a predetermination of the areas or fields from which they are likely to need information in connection with research and development tasks. ASTIA is well aware of the fact that this predetermination has its shortcomings and that the whole program is extremely difficult to administer. The fault does not lie in any office or activity or in ASTIA, but is in the shortcoming of the concept itself. It is the purpose here to elaborate on some of these points.

The continually increasing masses of scientific and technical information overlap each other to the point that separation of one field from another is both impractical and detrimental to the progress of research and development. Effective progress in science and scientific research and development depends heavily on liberal interchange and transfusion of all scientific fields of knowledge. This makes it possible for a breakthrough in one area to advance a larger front, thus increasing the possibility of other advances. Sometimes scientific areas have unforeseen relationships and to expect a scientist to predetermine the areas of information he will need for a research task is almost tantamount to expecting him to know the answer before he starts.

Scientists and engineers undertaking military research, in order to assure coverage of information, might tend to make broad predetermination of their subject requirements and to be certified accordingly. They would then have access to much information they will never need. If a conservative approach is taken, they will miss information in fields that would have contributed. A contractor, for example, currently investigating the characteristics of hydrazine would need to be certified to receive information in 14 of ASTIA's 33 subject divisions to cover the related information. No one could have guessed this a few years ago. This would give him access to far more information than he would have a need-to-know -- or even want. On the other hand, if he were confined to the most relevant two or three subject divisions, he would surely miss important information falling in some of the others.

These points bring us face to face with the realization that the subject matter dissemination for need-to-know inhibits rather than enhances the dissemination of scientific information. We cannot help but carry this thought to the next conclusion which would be that security itself is lowered. National security depends heavily upon progress on the scientific front. Scientific progress has direct relationship to increased knowledge. Public Law 864 of the 85th Congress sheds some light on how government policy leans with respect to dissemination of scientific information. This Public Law is the National Defence Education Act of 1958. It sets forth the concept that the security of the nation requires the fullest development of mental resources and technical skills of its young men and women. The act establishes a Science Information Service in the National Science Foundation for the purpose of making "more effective dissemination of scientific information." No differentiation is made between classified and unclassified information.

It was only a few short months ago that ASTIA discontinued all attempts to put out a classified version of the Technical Abstract Bulletin. This was because dissemination infringed upon subject matter dissemination requirements of need-to-know, although, only abstracts of classified reports were given. Today, ASTIA announces all of its reports in an unclassified TAB. This means that only unclassified information can be listed. To do this sometimes means elimination of essentially all identifying information including the title. ASTIA is first to admit that such fragmentary announcements have but little value.

Recently, numerous opinions coming to our attention have voiced the feeling that explicit subject-wise compartmentalization of information is essentially impossible and especially detrimental to the dissemination of information when applied to brief announcements such as those used in TAB. These opinions have pointed out that there is no statutory requirement for such compartmentalization and that need-to-know requirements may be fully met by fulfilling only two factors. They are (1) a determination of trustworthiness (clearance), and (2) the need for classified information in connection with official duties.

These thoughts are discussed here as food for thought and to raise the question "Is it time for need-to-know requirements to be inspected from the standpoint of perhaps increasing our national security; not by curtailing dissemination of information but by actually promoting it?"

NAVY-ASTIA RELATIONS

IN THE

INTERCHANGE OF RESEARCH AND DEVELOPMENT LITERATURE

BY

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Navy-ASTIA Relations in the Interchange of Research and Development Literature

Navy-Armed Services Technical Information Agency (ASTIA) relationships with respect to the dissemination of scientific and technical information are based upon firm foundations. In fact, the original predecessor organization from which ASTIA, as we know it today, had evolved from the Navy Research Section in the Library of Congress. Both talent and materials were subsequently transferred, first to the Central Air Documents Office (CADO) and then to ASTIA when it was established in Dayton, Ohio.

Navy-ASTIA relationships are further strengthened and clarified through the media of two widely representative committees. They are the Navy-ASTIA Liaison Committee (NALCO) and the Operational Liaison Committee (OLC).

NALCO met for the first time in 1955. It was a new concept in the area of scientific information dissemination. Membership of this committee is composed of the operating heads of the technical information divisions of all the Navy bureaus, the U. S. Marine Corps, the Office of Naval Material, the Office of Naval Intelligence, the Naval Research Laboratory and the U. S. Coast Guard. ASTIA is represented by an ex-officio member, the head of its Customer Relations Branch.

NALCO has as the basis for its organization, a Tripartite Agreement which was adopted by the three sister services. This agreement is identified, officially as OPNAVINST 5510.17 in the Navy; AFR 205-43 in the Air Force; and AR 380-60 in the Army. It was the implementation of a directive signed by the Secretary of Defense on 21 February 1955. Responsibility for over-all Navy Department participation in the ASTIA program was assigned to the Chief of Naval Research, who heads the Office of Naval Research. The Chief of Naval Operations effected this assignment through promulgation of OPNAVINST 5510.17.

Navy-ASTIA Relations in the Interchange of Research and Development Literature

The Navy-ASTIA Liaison Committee provides effective and necessary lines of communication. The several Navy bureau representatives present and discuss their particular problems before this group. The chairman, who is the Deputy Executive Assistant (Scientific Information) in the Office of Naval Research, personally transmits the committee deliberations to the Operations Liaison Committee. The different field activities of the Navy Establishment at their individual option make their respective requirements and problems known to their parent bureaus. It may readily be observed, then, how the numerous and varied problems continually arising in the procurement and dissemination of scientific and technical literature throughout the Navy Department and which cannot be adequately disposed of enroute, are channelled through established lines of communication to the OLC. It should be pointed out that communications flow in both directions.

The Operations Liaison Committee, which first met in 1958, has one member delegated from each of the sister services and is chaired by the Deputy Director of ASTIA. The Navy member of this group is the chairman of the Navy-ASTIA Liaison Committee; the Army and Air Force members fill similar billets within their respective services. Regular monthly sessions are scheduled except when special or emergency matters arise, and then extra meetings are held.

It was upon the disestablishment of the former ASTIA Policy Council early in 1958, that the Office of the Assistant Secretary of Defense (Research and Engineering) now the Office of the Director, Defense Research and Engineering assumed the initiative in establishing the OLC. In this manner a crucial gap has been bridged. The OLC provides the only direct line of communication between the operating personnel of the three services and the ASTIA administration.

Navy-ASTIA Relations in the Interchange of Research and Development Literature

While ASTIA administratively comes under the Air Research and Development Command, its operational activities are prescribed by the Tripartite Agreement, a joint tri-service instrument. As the OLC continues to function, a distinguishable pattern of operation seems to be emerging. It is a new type of activity, and we may reasonably assume as time goes on that it will become an increasingly important and valuable addition to the Department of Defense operational structure.

Perhaps a better insight into the functioning of both NALCO and OLC may be provided by a brief discussion of some of the problems and issues which these committees have endeavored to solve or alleviate.

Considerable variation and confusion had existed within the Navy with respect to the use of distribution limitation statements applicable to reports released to the ASTIA system. In fact, this was a Department of Defense-wide problem and was so approached. A sufficient measure of standardization has since been achieved to permit all participants in the program to live with the problem and continue satisfactory operations.

The procedures involved in the release of R and D reports to the NATO countries had posed a complex problem. It was necessary to avoid jeopardy to the already tight reproduction and distribution schedules of ASTIA on the one hand, and at the same time to meet higher-authority-imposed commitments relative to servicing needs of the several NATO nations. It is believed that these problems have been safely and adequately solved.

A perennial source of challenge and deep concern to the OLC is the revision and amendment of the basic charter under which ASTIA operates. This group has been actively concerned with this problem since its very existence.

Navy-ASTIA Relations in the Interchange of Research and Development Literature

The need for up-dating and strengthening various provisions of the Tripartite Agreement is clearly recognised by all responsible sources. While no sweeping changes have been made to date, certain improvements have been successfully adpoted, and more are continually in process - even a major revision.

Authorisation of the Atomic Energy Commission, the Federal Aviation Agency, the Coast Guard and the Federal Bureau of Investigation to participate in the ASTIA program followed general discussion of the problem by both the NALCO and CLC groups. Certain procedures and ground rules had to be agreed upon and adopted.

The use of the field-of-interest register and the procedures regarding authentication had to be standardised. The Customer Services Division of ASTIA was forced to demand a universal system of administering the use of this instrument, especially when ASTIA's work-load was doubled and still continued to increase.

Both the Navy and the Department of Defense participation in the Office of Technical Service's report distribution program came in for its share of NALCO and CLC deliberation. While this general area of operation poses certainually changing problems, cooperative study and discussion serve to alleviate the more basic issues.

Although no individual feels that the concept and achievements of either NALCO or CLC are even remotely perfect, it is reasonable to conclude that critical observers believe progress is being made. There is little, if any, precedent to provide guidance or encouragement. New ground must be broken. Frustrations are not unknown. But with hope springing eternal in the human breast, we who are involved are looking forward to continued improvement and progress.

Summary

DISCUSSION ON TECHNICAL SERVICES

Oliver T. Field

Miss Colwyn asked Mr. Hetrick how one got put on distribution for documents. Mr. Hetrick replied that a letter request to the Air Force activity having cognisance of the research contract is generally sufficient. To include in the letter a brief explanation of the requirement is always helpful to the scientists responsible for making up the distribution list, particularly if the contract is in a high interest area and requests exceed the number of report copies called for in the contract. He pointed out that if the Air Force activity administering the contract cannot be determined a request for this information may be addressed direct to the contractor, if known, or to the Director of Technical Services, ARDC. Letters should not be addressed to Headquarters, USAF, as this will just delay the reply. He added that these points apply to initial or basic distribution. Reports known to have been published should be requested of ASTIA. Very few Air Force activities maintain an inventory of reports for post initial distribution. For this one must depend on ASTIA.

Mr. Plant asked Mrs. Zenich why she can't process and accept partial shipments. Mrs. Zenich replied that partial shipments were processed, but that a line item had to be held until it was completed before it was processed. She explained this further by saying that an order might contain 25 titles, that is, 25 lines. If one line contained three units (as three volumes of an encyclopedia in parts) and only one unit came in, it would

need to be held in Processing until the other two units were received. Other lines, if they were received complete, for example, books in one volume, could go on through process even though all lines on the order were not received.

Miss Golwyn asked Mr. Heald what caused the discontinuance of publication of ASTIA cards. She said that if any similar service was reinstated, she hoped it would be in card form and not like TAB. Mr. Heald replied that a study of the use, compared with cost of production, had not justified continuation of the card service. Need-to-know had but little to do with discontinuance of the cards -- especially to military librarians. It is just that they were not being used enough to justify the cost.

Mr. Field asked if any of the participants used or were interested in using standing orders. Miss McMullin said that her Naval agency did not use standing orders but could if it wished. Mr. Mountain, also Navy, said that he was able to get continuations under the Naval Blanket Purchase Order procedure.

Mr. Field thanked Mr. Louis A. Kenney for acting as secretary of the meeting and Mrs. Florence Brunner who gave a very able extemporaneous presentation on documents acquisition in the Army, replacing a member who could not attend. He also thanked Mrs. Dorothy Rice and Miss Catherine Rinker for reading papers written by Mrs. Ingrid Voss and Miss Evelyn Stone, who could not attend. The meeting was adjourned.

LIBRARY ADMINISTRATION

Moderator

MARION E. POWELL

Head, Technical Information Branch

Bureau of Ships

Washington, D. C.

Introduction

Panel on Standardization in Military Library Organization - Management and Service

"Standardization is dynamic, not static. It means not to stand still but to move forward together." This quotation, appearing in the Introduction of an American Standards Association brochure on How American Standards Are Made, is particularly significant to Military Librarians. Our libraries represent a cross section of Public, University, and Special Libraries. As such we share their problems and their efforts toward coping with them. In certain areas much has been done towards standardization, in other areas work is in progress. Efforts are being made to coordinate this work at both national and international levels. It is an opportune moment, therefore, for us to explore the whole problem of devising standards with which we can live in the Military Organization.

The Panelists will speak in the following order:

a. Standardization in Military Library Organization	Cleo S. Cason Technical Library Army Rocket and Guided Missile Agency Redstone Arsenal, Alabama
b. Standards in Internal Organization of Military Libraries	Mildred H. Brode David W. Taylor Model Basin Library Washington, D. C.
c. Standards for Equipment	Elmer M. Schloeder Army Library Washington, D. C.
d. Statistics in a Military Library How and Why We Keep Them	Frances R. Dickey Technical Library Army Rocket and Guided Missile Agency Redstone Arsenal, Alabama

e.	The Literature of Library Standards	James G. Hodgson Quartermaster Food and Container Institute Chicago, Illinois
f.	The Technical Library and Its Administrative Justification	Logan O. Cowgill Office of the Chief of Engineers Library Department of the Army Washington, D. C.
g.	Applying Management Concepts to the Preparation of a Technical Information Bulletin	Michael A. Costello Picatinny Arsenal Dover, New Jersey

Since we are most fortunate to have Dr. Luther H. Evans as a guest I shall take the liberty of asking him to comment later, on the Brookings Institution's plans for a survey of libraries in Federal departments and agencies. Dr. Evans serves as Project Director of this survey.

S T A N D A R D I Z A T I O N

I N

M I L I T A R Y L I B R A R Y O R G A N I Z A T I O N

by

CLEO S. CASON

Chief, Technical Library

Army Rocket & Guided Missile Agency

Redstone Arsenal, Alabama

Standardization in Military Library Organization

Louis Shores[2] in his book, "Basic Reference Sources," begins his introduction as follows: "Library organization. Every well-organized library, large or small, public, college, school, or special, includes these four major divisions: acquisitions, preparations, circulation, reference." He further defines the work performed in each division in a very clear manner: The acquisition division selects and acquires the books, periodicals, and whatever else goes into the library. The preparations division classifies, catalogs and otherwise prepares the acquisitions for use. After the materials have been acquired and prepared they become the responsibility of the two public service divisions, circulation and reference. The circulation division is generally charged with the dissemination of materials that may leave the library. Reference is the division which interprets the library's collection to its users.

Irene M. Strieby[3] wrote a splendid article for the October 1952 issue of LIBRARY TRENDS entitled "Organizational Relations of Special Librarians." In it she gives the following definition of organization: "The term 'organization' has a dual meaning; it signifies a business entity as well as structural and functional relationships existing among its personnel." She further points out that "special libraries are no more alike than the firms they serve..."

J. H. Shera[1] emphasized the smallness of the special library unit when compared to its parent organization in his article, "Special Library Objectives and Their Relation to Administration," and suggested the librarian would do well to disregard, for the most part, administrative doctrine applicable to public and university libraries and choose, as his polestar, the particular objectives of his supporting enterprise.

While the internal functions of a special military library will be much the same as those of libraries in general, the methods of acquisition, organization, and administration of controlled information will vary greatly from traditional

techniques developed for so-called standard library materials. These variations arise from (1) the vast quantities of technical reports produced annually, (2) lack of standardization of format and bibliographical elements, and (3) need for special safeguards for security controlled holdings. Therefore, the manner in which these functions are performed will be directly related to the objectives and needs of the parent organization, as well as local interpretation of security regulations of the branch of the service under which your management operates.

Regarding the "best place" for the library on the organization chart, an examination of many organization charts of industry and government departments failed to reveal the position of the library. It may be grouped in an Administrative Division, as is the case in the Department of Agriculture, along with Budget and Finance, Information, Personnel, etc. The pattern most often observed in industry is one wherein the librarian reports to the head of the research division or his executive assistant.

In searching for material on the subject of library organization, available books on management and organization did not have the word "library" listed in their indexes. Conversely, available books on library administration failed to include the words "organization" or "organization chart" in their indexes. Can it be possible that libraries are so efficiently operated that they function effectively from any spot on the organization chart? Since the library is itself a communication center, there is direct access from every level as well as freedom to communicate vertically, horizontally, and diagonally across the chart. This may account for the apparent lack of concern over organizational location by library administrators and authorities on management.

The 13 organization charts which you provided for this study revealed the following:

One library has direct access to the Commander.

Five libraries are placed organizationally one block from the Commander.

Five libraries are two blocks removed from the Commander.

Two libraries are three blocks away from the Commander.

The libraries are grouped roughly under the following organizational divisions:

Five are included in Administrative groups.

Four are found in Service groups.

Three are included in Research groups.

The one reporting to the Commander stands alone.

The conclusions reached after a hasty examination of available information and data collected are (1) that military libraries, as in industry, are no more alike than the agencies they serve and (2) that standardization merely for the sake of being standardized would be unwise. It is recognized that improvement in organizational structure might result from a study of the organization of other libraries, industrial as well as military. To you who are interested in the subject of organisational relations, a study of Mrs. Strieby's[3] article and her references are heartily recommended.

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STANDARDS IN

INTERNAL ORGANIZATION

OF

MILITARY LIBRARIES

by

MILDRED H. BRODE

Chief, Library Branch

DAVID TAYLOR MODEL BASIN

Washington, D. C.

STANDARDS IN INTERNAL ORGANIZATION OF MILITARY LIBRARIES

by

Mildred H. Brode, Chief, Library Branch, David Taylor Model Basin, Navy Department

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There has been a tremendous upsurge in the past two years in the search for standards in the Library field which suggests a parallel to the impetus given the importance of the collection, organization and dissemination of technical information provided by Sputnik I. In the case of "Special Libraries," including Military Libraries, practically all of this greatly increased interest and activity has been apparent only in the past year, and has been due in the case of special libraries in general to a realisation that the establishment of "standards" of library administration and organization, of work measurement and achievement, of services, of type and numbers of staff, of breadth, depth, quality and variety of collections, of suitable and adequate space and equipment, was a necessary step in the graduation of special librarianship from a craft to a profession. The importance of such basic standards was moreover seen to emanate, first, from a need for guide lines for those directly responsible for the operation of special libraries and, secondly, from the need for guides by higher management faced with the establishment of a library and the adoption of policies for its operation. (1)

This last reason was, I believe, the dominating one in the case of Military Librarians. I was personally converted to the need for such standards by the paper presented at the second Military Librarians Workshop, by James G. Hodgson, Chief, Library Branch, QM Food and Container Institute for the Armed Forces, entitled "Size and Services of a Research Library as Related to the Parent Organization." (2) Mr. Hodgson made a most convincing

plea for some professionally established standards with which to confront military management unfamiliar with requirements in the line of budget, its distribution, staff, size and composition of collections, and space, for the effective operation of military research libraries. Most of this paper will be concerned with some suggestions for ways and means by which military librarians might proceed with the development of such guide-lines as those for which Mr. Hodgson so eloquently pled.

But first I should like to make a slight digression in the direction of the two other main types of military libraries. As I have listened to and compared problems with my fellow military librarians at such conferences and workshops as this and the annual SLA meetings, I have realized that military libraries fall into three main types, not by the three Services, but by the essential functions which they perform. First, there are the Post libraries which in most fundamental operations find a counterpart in public libraries; secondly, there are the academic libraries of the service "schools" and universities which in their organization and management closely parallel academic libraries in the non-military world; and thirdly, there are the military libraries set up to fulfill the requirements for bibliographical and informational services of the numerous military research and development laboratories. These last more closely resemble "special libraries" and in most cases, those included in the Science-Technology Division of SLA. The first type has already provided itself with published regulations for operation. If the librarians in this type of military library should feel the further need for standards, they would certainly find a great deal of help in the 1956 revision of the Public Library Standards. (3) For the use of these standards in obtaining larger budgets for needed expansion of services, read the encouraging article by Carma Zimmerman in the ALA Bulletin for November 1958. (4)

For the military academic librarians also, a notable band of outstanding

academic librarians, college administrators and scholars has gone before, and with painstaking effort, wisdom and insight produced "a guide for the 1960's, and a blueprint for the next decade" in Standards for College Libraries published in their entirety in the July 1959 issue of College and Research Libraries. (5) Felix E. Hirsch, Chairman of the ACRL Committee on Standards has written two illuminating articles on the Standards and the methods and philosophy behind their development. (6),(7)

Now let us turn to the possibility of devising standards for the third type of military library - the military research library, which most closely resembles special libraries in the science-technology field. Until recently I have always believed that the real value of special libraries lay in the uniqueness of each - that each one was tailored to fit the exact bibliographical and informational needs of the organization which it served and that any attempt to standardize such libraries would involve a paradox, as Leon Carnofsky said at the SLA Annual Meeting (Business Division) in June 1958 at Chicago. (8) It would seem, however, that in these special libraries there are common elements, and that we might begin by framing standards for these elements. Mr. Carnofsky reached the conclusion that only by couching standards in broad general terms which each library could apply to its own situation, could a guide be constructed by which management might evaluate the library operation, and the librarian constantly strive to improve his organization and services. He lists five broad principles which might be used as criteria for testing the quality of any library:

1. Each library should have the materials necessary to supply the information required by the personnel of its parent institution.

2. Each library should have the personnel necessary to collect and assimilate the information needed.

3. Each library should as far as possible observe sound principles

of personnel administration.

4. Each library should make use of materials available in other libraries.

5. Each library should be so organized as to permit systematic location of desired information.

The Public Library Standards are a "guide to total evaluation of (public) library service." Seventy guiding principles organized into six chapters form their substance. Under the guiding principles are almost two hundred standards. Each provides a measure of achievement of the guiding principle under which it stands. Material on costs is presented in a supplement which provides estimates of annual costs of library service at 1956 price levels.

Similarly, the Standards for College Libraries are designed to provide a "guide for the evaluation of libraries in American Colleges and Universities." The chief aim of the committee which framed these standards was to provide flexible standards, based on firm principles.

Each of these documents has formulated principles which apply to the internal organization of all libraries, and with study by special librarians in military research and development laboratories, they could be adapted to their own situations. There is also much literature in the field of personnel administration which is applicable to library organization and administration. Articles on measuring work performance can form a useful basis for standards to test the measure of achievement of the guiding principles. Two very helpful articles along this line are Paul Wasserman's Measuring Performance in a Special Library - Problems and Prospects in October 1958 Special Libraries [9] and Katharine K. Wood's A Tool for Management Evaluation of Library Services presented at the Science-Technology Division Meeting of the 1957 SLA Convention.[10]

The organization of a technical library for service must spring in the first analysis from the mission and nature of its parent institution or activity. This will determine the kinds and quality of service to be rendered by the informational services which are to support the research to be carried out. Once these requirements are determined, the next step can be taken, which would be to estimate programs, size and type of internal library organization, size and nature of the collections, reference tools, bibliographic, indexing, abstracting, and translating services necessary to fulfill the requirements. These factors will in turn determine the numbers and qualifications of the staff, and the space and equipment required to most effectively select and provide the collections, organize them for use, and perform the reference services which will best support the mission of the activity. Perhaps the most useful "standard" military librarians could provide their management would be a requirement that upon the proposed establishment of a library, a committee be formed of the technical director or the director of research, a library consultant of wide experience in a similar or related subject field, and some representative of the activity's planning department to determine the requirements and policies to be adopted for the organization of the new library. Only then would special or military libraries not "just grow" like Topsy. Each SLA Chapter has such a consultant who might form an initial contact for management.

In general the greater the stress on theoretical research, the more adequate must be the collection in fundamental, background compendia, treatises, and foreign as well as English-language research and theoretical periodicals and indexes. The current report literature is also invaluable to the research scientist, and he will want it so organized with indexes and abstracts that he can most often make his own search. Engineers and technicians concerned with development and testing, and

administrators entrusted with planning research programs usually want the library staff to make the search and send them a list of pertinent references, ranging all the way from a half dozen titles to book-size continuing bibliographies. By making a study for each parent installation of the proportion of pure research to development, and the numbers of technical staff engaged in each of these activities, a standard could be developed for size and type of collections and kinds and quality of services required of the library. The volume of report literature available in the subject fields of each installation and the existence on the station of mechanical searching equipment, will determine whether the cataloging will be of the conventional kind or will be coded for use in a mechanized searching system. The Navy's ONR-sponsored "Research and Development Facilities Located at U. S. Naval Shore Establishments" gives information on mission, personnel and facilities of Navy Laboratories which would provide a useful point of departure for establishing criteria for the first step in analysis of requirements for library informational services in a research laboratory. No doubt the Army and Air Force have analogous publications which would be equally useful.

As to type of staff required to carry out the program for a research library, it is almost mandatory that some members be subject specialists in the major or closely related fields of the specialty of the laboratory served; that is, in a medical library, persons trained in biological science, and in a physical science or engineering laboratory, persons with a physical science background. In a small library, where the Chief Librarian, as well as being an administrator, actively participates in selection of the collection, in the reference service by compiling bibliographies and answering subject reference questions, in cataloging by acting as a consultant on subject headings, it is most desirable that the Chief Librarian, if possible, be a subject specialist. In a larger library, where the Chief Librarian is

almost exclusively occupied with administration, policy determination, and public relations, such as the National Library of Medicine, Department of Agriculture, or the NASA for example, the subject specialists would most appropriately be in the reference or bibliographical department where bibliographies are compiled and indexes and abstracts of report and periodical literature prepared. In such a library it is most useful to have a good translator, especially of German and Russian, on the library staff, principally to make translations of Tables of Contents and to abstract foreign articles so that the scientists can determine if the material is of sufficient value to their work to warrant full translation. There must always be sufficient sub-professional and clerical supporting staff to perform circulation, descriptive cataloging, ordering, processing and typing routines, so that the professional staff need not spend their time on these activities.

As for standards of actual internal organization or organization charts, the functions in almost any well planned library situation divide quite naturally into two main groups, which may be designated as (1) Readers Services and (2) Technical Processes or Services. This is true whether (1) is called Readers Services, Reference and Circulation, Book Selection, Bibliography or any other title and (2) designated Technical Services, Cataloging, Processing, Accessioning, or Collection Maintenance, and regardless of the size of the library staff and their qualifications, the organization chart should be based on these two main types of functions.

A useful point of departure for framing standards for collections and staff is a survey which would include recommendations for requirements above the existing conditions, for <u>adequate</u> services. Such a survey requires the greatest care in setting up a suitable questionnaire to elicit the desired

information, a good response or sampling, and a careful analysis and appraisal of the results. Robert L. Martin, the immediate Past-President of the Military Librarians Division of SLA and Chairman of the Military Librarians Survey Committee, has developed such a questionnaire which has been sent to the Chief Librarians of all known American and Canadian military research libraries. We hope the response will be as complete as possible in order to provide an adequate sampling to assist in developing standards. Another useful survey is that conducted by the Survey Committee of the Council of Librarians, East Coast Navy Laboratories, C. A. Erbert, Chairman. The final edition of this survey covering twenty-nine Bureau and Laboratory libraries was issued in April 1969 and gives statistics of staff (numbers and grades of professional, sub-professional and clerical, and their functional distribution - cataloging, circulation, or reference); budget; clientele (both numbers and type); circulation methods; services and methods; collections; and prime subjects.

At the fourth meeting of this organization to be held the last of this month at Dahlgren, Virginia, a proposed model "library instruction" prepared by Navada Montgomery as Chairman of the Library Instruction Committee, will be discussed and acted upon. This will suggest topics on which library standards or principles could profitably be set up. Its main topics are Organization; Administration; Technical Processes; Services; and Public Relations.

I cannot close a list of helpful surveys without including the Brookings Institution Survey of Library Facilities in the Departments and Agencies of the Federal Government which was announced in June 1969, and is expected to be completed in about eighteen months. This was a brain-child of the Professional Activities Committee of the Washington, D. C. Chapter of SLA and was sponsored by SLA, ALA, and the Association of Law Librarians. It is

financed by a grant of $72,965 from the Council on Library Resources, Inc., and was originally organized with Luther H. Evans, former Librarian of Congress and Director General of UNESCO, serving as senior consultant for the project which was under the direction of Charles A. H. Thomson, at that time a Senior Staff Member of the Brookings Institution. Col. Thomson has since left Brookings for RAND and Dr. Evans is now Director of the Survey. He is aided by a Committee of outstanding librarians and administrators. Ralph Dumbar has recently joined the Survey Staff. The survey is expected to provide a solid, factual basis on which significant improvements in public policy formulation and administration can be made. It is also anticipated that gains in the smooth interlocking of the library system generally can be made, as well as a flexibility, speed and responsiveness of service, morale of personnel, application of new techniques and economical use of available resources. On September 24th Dr. Evans reported to a joint meeting of the Washington, D. C. Chapters of SLA and ALA on the preliminary work. The survey has the active cooperation of libraries and administrators which is most important. A trial questionnaire is being sent to all Government Agencies which are to be included in the survey. Committees made up of administrators and librarians will be set up in each area of the Survey. Dr. Evans announced the following tentative chapter headings of the final book length presentation of the findings and recommendations of the Survey.

I Introduction

II Missions of Federal Libraries and of Agencies which they serve

III Resources

IV Services of Libraries. Research Reference Service

V Administration. Organization and Management. (Place and status of libraries in agencies; internal organization)

VI Cooperation and Coordination Among Libraries

Because of the prestige of the Brookings Institution as a private, non-partisan organization devoted to objective research on key issues of public policy, and of the staff of the Survey, high hopes are entertained for Government acceptance of the recommendations coming out of the Survey.

In closing, I would like to suggest that the special librarians have one worth-while advantage in coming late to the establishment of standards for the services furnished by their profession, in that they can profit from the methodology for constructing standards and the products of these similar professional groups which have preceded them in this area. I have tried to trace the progression which a committee could follow in arriving at recommended principles and concrete standards to measure achievement of these principles in a military research library:

(1) From mission and composition of technical personnel, determine services required.

(2) Formulate the programs, policies, internal organization, collections, and reference tools required to provide these services.

(3) Establish standards for the staff, equipment and space necessary to effectively collect, organize, disseminate, and administer the tools of the needed services.

It is recommended that the Military Librarians appoint a Committee with sub-Committees in each of the three major functional areas in which they operate, to study existing relevant standards and surveys, and to compose a set of standards applicable to each area. It is also recommended that the sub-Committee in the technical research library area seek cooperation with the Standards Committee of the Science-Technology Division of SLA, as the group most nearly concerned with the same problems.

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S T A N D A R D S

F O R

E Q U I P M E N T

by

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Standards for Equipment

Other papers in this series on standards have discussed the progress of the library profession in examining the need for standards, and in their formulation and adoption in such areas as personnel selection and classification, pay plans, accreditation of library schools, binding, microphotography, etc. Previously, the profession has been concerned with standards for its operations with little attention given to standards for equipment. What standardization existed frequently resulted from standardization in the area of operations. The size of catalog cards forced the adoption of a standard size for the card catalog cabinet and trays. Perhaps, similar examples could be found to show how standardization is forced upon libraries because of gratuitous circumstances.

It is not the purpose of these remarks to discuss standards as a technical subject. No attempt is being made to even define "standards" or to indoctrinate by engaging in an explanation of the kinds of standards that exist. This avoidance of the scholarly approach and the scientific exposition is of necessity because of the limitation of the author's knowledge of the subject.

In speaking of standardization of equipment used in libraries, we will limit curselves to the consideration of those standards that are felt to be most useful to librarians. Primarily, we are concerned with standards that are translated into specifications. Specifications are simply written instructions to the manufacturer or supplier as to what we want - the material to be used, it's quality, construction, strength, durability, efficiency, color, form, etc. The specifications state that we want a catalog cabinet, constructed of metal having a certain tensile strength, with a certain type of lock and pull handles, a certain color, and fire resistant for a number of hours. In other words, we are asking for a standard

catalog cabinet of the type customarily used in libraries and not a reconstructed orange crate.

Other kinds of standards are used such as standards of weight, size, form, nomenclature, etc., and all of these usually become part of the specifications. Testing and the development of testing methods for equipment is another form of standardization. All of us are acquainted with the leading consumer research publications, and with such tests as are periodically performed to determine such things as gasoline mileage of different makes of automobiles. Testing simply tells us if our products live up to the standards we set for them. Basically, standards are our guarantee that we will be able to purchase products that give full value, are of consistently high and uniform quality, and are reasonably priced.

Today, librarians are giving a hard look to the need and desirability for equipment standards. Certain factors must be considered when discussion turns to this topic. First, there must be a demonstrated need for equipment standards and on specifications written from them. Secondly, the adoption of standards and the use of specifications must result in substantial savings in costs and improved product quality.

Is there a real need for equipment standards? Consumers in widely diverse fields have long since realized that standards for material they purchase have resulted in uniform products of consistently high quality and economically priced because of competitive marketing. Purchasing agents for municipalities, to use but one example, can show what has been done through the adoption of uniform standards and specifications for items such as snow plows, fire engines, garbage trucks and all such hardware that is needed to economically yet efficiently manage a community. Reports from the purchasing agents highlight the savings effected by operating under standards as contrasted with the costs of operation in pre-standard times.

Libraries expend approximately $60,000,000 yearly for equipment and supplies. Although it is yet problematical in the face of a lack of equipment standards what this yearly expenditure would buy if standards existed, it is reasonable to assume that the procurement experiences in other fields which have resulted in lowered costs and increased buying power while still maintaining quality would also apply to procurement of library equipment. With this picture in mind, we may well ask the question of what is being done by the profession to determine the need for standards and what is being done to establish sets of standards and specifications?

In 1957, the Council on Library Resources, Inc., expressed an interest in studying the need for equipment standards and this interest resulted in the Library Technology Feasibility Study which was conducted in 1958 by John H. Ottemiller of Yale University. The Feasibility Study reviewed the literature on standards, held meetings and personal interviews, corresponded with librarians, and consulted with manufacturers and specialists in procurement. The results of the study confirmed what had long been suspected - that librarians desired and are overwhelmingly in favor of standards and specifications for library equipment.

The Library Technology Feasibility Study provided the first and only systematic survey of the problem and its recommendations were accepted by the Council on Library Resources, Inc., which then promptly provided a grant of $136,395 to the American Library Association for the establishment of a program officially known as "Library Technology: A Standards Program on Supplies and Equipment."

The Library Technology project will initially compile and publish a series of standards for equipment used in libraries. Later, an information service will be established that will respond to telephone and mail inquiries. As new standards are developed, they will be published by the American Library Association along with any pertinent information and reports for the guidance

of librarians and purchasing agents. Also under consideration is a plan for establishing a testing program that will provide information on new products and on redesigned equipment. A very recent announcement from the project states that within a few months it expects to publish the first series of standards and specifications.

One of the first steps in the work program of the project was to seek advice and assistance from recognized authorities in the field of standardization. These authorities have already alerted librarians not to expect series of standards that adhere to a rigid pattern as had been customary in former times, and which is still found to be the case in some specifications drawn up by governmental agencies. This warning against too rigid a pattern of specifications is sounded because such practices tend to eliminate competitive pricing because too few manufacturers are in a position to meet all the requirements. Any request for material that presents unusual requirement increases costs and librarians should use caution in requesting equipment that deviates from standard patterns. Another warning sounded by the experts is that standards and specifications should be kept up-to-date. The use of specifications developed years ago fails to recognize new products and new materials that frequently will be found less costly and which may provide higher standards of quality. If the standards are flexible they will encourage frequent revision and the writing of specifications will permit adjustment to meet the progress of the equipment industry.

Testing methods, testing, evaluation and reporting on new products or redesigned products is a phase of the project that requires cooperation from technicians, librarians, designers, manufacturers and purchasing agents. As the ultimate consumer, the librarian is vitally interested in having all viewpoints presented fairly and honestly. This is a technical phase of the

project that may bring some opposition from manufacturers and suppliers; however, no one will view this phase as unfair to anyone and actually when practiced it should not be troublesome. It can be assumed that the Library Technology project will competently carry out these technical phases in order to assist the librarian make a wise decision in any purchase he is considering.

It is heartening to know that the Library Technology project is already underway and that guide-lines will soon be published to aid the librarian select his equipment knowing that the efforts of authorities in the field of standardization will be utilized. We now realize that it takes more than just a staff and a stock of books to provide efficient library service. Equipment is also needed to carry out the mission and functions of a library, and library hardware is suceptible to standardization, even more so than many library operations. Cooperation is needed to make this project a successful one and the results from a standardization program should prove beneficial to the profession. This is an opportunity to demonstrate that the profession is dynamic and unafraid to seek out and adopt the techniques of the "space age."

STATISTICS IN A MILITARY LIBRARY

HOW AND WHY WE KEEP THEM

by

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Statistics in a Military Library - How and Why We Keep Them

Statistics is the science of collecting, organizing, and interpreting numerical facts. The collection of good data is very important in statistics since the library sometimes is dependent on the decision made by management based on the collected data submitted by the library. Unless statistics are collected in a systematic, consistent and appropriate method, they can be discredited in the eyes of management. The library must be careful to gather the data that will reflect its performance and accomplishments in services rendered. Both the library and management need this type of information.

Suppose the library is trying to justify the need for additional staff. Probably some of you have had numerous experiences in this type of problem. If statistics were not kept, how did you prove your justification to management? You might say you are understaffed due to the increase in material received, or due to the increase of patrons. Management will ask, "How much increase in material received?" "How many additional patrons?" Your next step is to pull out of the air a percentage of increase to submit to management, which always results in an inaccurate percentage, a confused management, and a headache. With statistics you can furnish management with accurate and substantial data and also comparison in data of past and present performances. The results - less time spent, elimination of guesswork, a happy management and usually additional staff.

Library functions are usually divided into the following units: Acquisition, cataloging and processing, reference and research, circulation, distribution and weeding. These functions should be carefully studied and a plan formulated for consistently maintaining a day-by-day record of the activities involved in performing duties in each unit.

The recording of statistics may be accomplished by various methods. Select the system that will be useful to the library and management. Circulation can usually be recorded by counting the number of documents or books checked out of the

library and the number circulated inside the library. Some libraries count the number of documents and books checked in. Acquisition can easily be recorded by counting the number of titles ordered and received. Cataloging can be counted by the number of titles cataloged and processing by items processed. Distribution of documents can be recorded by counting the documents distributed on retention basis and inter-library loans by the items loaned or borrowed. Weeding should include the number of documents destroyed or sent to a records holding center and the number of books withdrawn from circulation and salvaged. Reference and research present a greater problem in recording since there exists various methods of counting this type of service. This can be recorded by the number of reference problems answered and the number unanswered, or the total number of problems received. The record of unanswered questions can assist in determining what is needed to strengthen the library's collection of material but could also be interpreted to reflect the efficiency of the reference staff. If a reference problem consists of several parts involving more than one subject search it may be counted by the number of parts to each problem. Reference problems may also be classified by the type of problem.

After collecting the right data we need a systematic method of organizing and interpreting this information. Organization of the collected data should be carefully planned to enable quick interpretation of desired information. The library's functions should be clearly defined and the type of work units representing each function should be determined. Each work unit should be defined, listing the routine of duties involved. All work units should be recorded in such a manner that they can be analyzed effectively. Make certain that the tasks that are not directly reported are correlated with work reported in order to satisfactorily measure the entire operation.

Select a report system that is economical in both time and cost. Since one of the purposes of statistics is to reduce time and cost, the method of reporting should be kept inexpensive and simple. Miss Katherine Weed, Librarian, Technical

Library, Bureau of Ordnance, Department of the Navy has pioneered in this field by developing a work measurement reporting plan for her library.

It is true that quantitative measurements do not fully reflect the effectiveness and achievements of library services. It is also true that reliable statistical data is an invaluable source of information for justifying the existence of today's libraries. In the future, some of us may be using formal work standards as a guide in which statistics will prove a necessity in the measurement and comparison against these standards.

With reliable statistics management will have a clear picture of what is being done, how much is accomplished and the amount of time required to perform these duties.

Why do we keep statistics? They are proof of our progress and improvements. They can be used for justification of personnel, physical space, equipment and budgets. They support our needs, justify our existence, offer defense for our rights and provide management with the knowledge of library services.

THE LITERATURE
OF
LIBRARY STANDARDS

by

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The Literature of Library Standards

At the last workshop I presented a paper based in large part on two reports about the reorganization of the library of the Quartermaster Food and Container Institute for the Armed Forces. Frankly, I have nothing new, or perhaps I should say basic, to add to what I said then. As a result I felt it quite wise of the Program Committee to ask for a talk on the bibliography of the subject, because unless we have a fair idea of how library standards came about, and what is being done about them in related fields, we shall be somewhat at a loss in evaluating our own approach. Hence I shall be talking about an annotated bibliography which I am preparing and which it is hoped will be issued in the series of the Military Librarians Division of the Special Libraries Association. Obviously, since I cannot read you the whole bibliography I can only talk about some of the more important aspects and expect you to find your own footnote references from the bibliography once it is published. My remarks in general follow the outline of the list but with some additional comments that will not appear elsewhere.

The establishment of standards for libraries is important for four major reasons: 1. They serve as a guide to what the library should be doing. 2. They indicate in general what staff and other facilities are needed for effective library work. 3. They serve as a guide as to whether or not available staff and resources are being used to the best advantage. And 4. (and in some ways most important) they serve as a guide to budgetary authorities in determining the amounts that must be spent each year in order to provide adequate and efficient library service. Standards should be so set that they show what is needed, from bare minimums to really full and complete service. Unfortunately, most standards are geared to show only minimums. This situation does have its point, however, because too many libraries have to

struggle even to reach a minimum of effectiveness, let alone what is needed for full service.

The setting of standards has a long history, but, unfortunately, it is only in the last few years that they have been approached from a qualitative rather than a quantitative basis. Standards for college and university libraries were the first to receive serious attention. For many years before the formation of the Association of American Universities in 1900 those universities which has been developing strong graduate programs had tried several ways of rating colleges as a basis for picking the best qualified students for graduate work. With the organization of the first regional accrediting agency, The North Central Association of Colleges and Secondary Schools, in 1896, the library was specifically mentioned in the standards and before long these came to be 8,000 cataloged volumes and an annual expenditure per year of $5.00 per student. In 1936, the new standards of the NCA became increasingly specific, it was hoped, on a more qualitative basis. For many years, then, the specific figures used in evaluating libraries were based on the position of the library in the percentage scale for all libraries. Present NCA standards are again more or less general, but the examiners have as guides in their evaluation figures which show where on the percentage scales the particular institution stands.

In the meantime there had been much agitation for standards for public libraries. While there seems to have been an effort in that direction back in 1897 by the University of the State of New York, the first serious attempt at setting standards was made by an A. L. A. Committee appointed at the mid-winter meeting in 1916. The latest standards, which have been developed as an aid to administering the Library Services Act, reflect in many ways the efforts of the past few years to have standards based upon large unit services.

Special libraries, in spite of a number of articles which attempt to show staff size, collection size, and total budgets of specific libraries, did not get into the picture seriously until 1958 when the special committee set up to work out requirements for membership decided to undertake a study of standards for special libraries. Our own interest in this subject, as expressed at the workshops, is but a corollary of these various developments.

Military librarians should be interested in the standards of all types of libraries because of the diverse nature of military library service. Post and station libraries, and hospital libraries have many features in common with public libraries. Libraries of the service school have much in common with college and university libraries. Libraries serving research installations and administrative offices have a close relationship with special libraries in general and should look in that direction for help and guidance.

There are certain aspects of standards which must be set out in general terms and which it must be recognised cannot be translated into specific economic terms for the use of the administrative and budget authorities. One is the clear need for definition of the function of the library. Another is a statement of the services that a library should render, based upon some understanding of what services it is most economical for the library to perform. Data are not available to show just how much reference work, the making of bibliographies, and other types of work cost, or to what extent these services represent an over-all saving to the institution when carried on in the library. Some of you may remember the little pamphlet which I distributed last year, the one by Larrabee called "The Reading Crisis" in which he points rather dramatically that the librarian should be "guide" not "reader." Yet all these factors must be considered in setting up any standards. They may have to be stated in general terms, but they will

be meaningful for our purposes only when we finally are able to translate them into something more specific.

Carnovsky goes so far as to say that it is not possible to set up specific standards for special libraries and holds that they need to be held to four general propositions: 1. Necessary materials to do the job. 2. Personnel necessary to do the job. 3. Sound principles of personnel administration. And 4. Making use of the materials in other libraries. This is about as exact as it is possible to go in general terms, but it fails to meet the needs of the specific library in arguing with budget-conscious administrations who want those standards set in terms of concrete dollars and cents. What the individual library needs is some way of expressing general terms in specific ones which say how many people are needed for specific jobs, how much cataloging one person can do, what types of help are needed for particular activities, and how much money has to be spent on book-stock to meet the needs of the individual installation.

If this last point of view is to be taken it is obvious that standards include any measure that may be applied to a library. It is probable, as a practical approach, that any of the standards which are adopted will have to be in fairly general terms, but somewhere in them will have to be a few concrete specifications that may be used to correlate with total budgets of installations, or total number of research and administrative people served. It is also obvious that in order to agree on the most important specific yardsticks, and make them stick, it will be necessary to have a mass of background information that may be used as a basis for setting up the specific measures adopted. In that sense any data on library operations which show how much they cost, or how much they save the institution as a whole, are very much grist to our mill.

The specific figures that are used for public libraries revolve about the total population served and the amount per capita spent on the library system. Using those basic facts it is easy to arrive at a figure of so many volumes per capita, total staff, annual increases in book-stock, and other easily secured ratios. Location of the library with reference to that population also must be considered. In the case of the post and station libraries, this same type of standard is followed in the regulations which have been issued for the guidance of the commanding officers.

College and university libraries are likely to use the figures from the annual ACRL statistics, particularly the expenditures per student, and the percentage of the total educational budget. Actually, these same figures, plus data on library use, increase in the book-stock, and other similar figures are used by the various accrediting associations for their evaluations. With certain modifications, these standards are very useful to the military school libraries.

The military research and administration libraries have no such comparisons available. They can show that in general special libraries spend a far larger percentage of their budget for staff, and less for book-stock, than any other type of library. This is important because the budget distribution should be one of the basic points in any set of standards. Some of the reports have set out the number of librarians in proportion to the total of research and engineering personnel (ESRD) which is a help. Unfortunately, these figures are not correlated in any way with the effectiveness of the individual libraries and hence are not a proof that larger staffs and more money spent resulted in more good to the company at a lower cost than if the libraries did not exist. We as librarians believe that this is the case, but there are no figures to prove it. One thing we do know:

that greater personal service in special libraries cannot be given without more help per person using the library. We believe that this greater service is economically justified in terms of the total cost to the institution, but we still cannot prove it from existing data.

We also have some difficulty with what the available figures mean. Some of the reports on special libraries seem to be giving the total number of persons, or total budget, of the information service of which the library is so often a part. Librarians, because of their inclinations and training, have to know quite a bit about reproduction or publishing processes, and quite a number of them are verbal-minded enough to do considerable producing themselves. As a result, librarians are often a "natural" to take over certain editorial or information services so that data on strictly library services become clouded. The situation is not helped by the importation of the European term "Documentation." Certain European librarians, with the keen desire for service so typical of the American librarian, called themselves Documentalists. They did not want to be confused with what they conceived a librarian to be, that is, merely a keeper of books or a scholar or student of the old and rare volumes preserved in some of the older and better known European libraries. However, if it is economical for the library to cover wider fields, the situations where it is desirable should be set out in our standards.

Besides the standards which apply to special types of libraries there are certain features that are common to all libraries, irrespective of kind. These facets are covered in Section VI of the bibliography, but because many of them are unlikely to be used in specific standards only suggestive duties are included. Training for librarianship has many features that are common background irrespective of the type of library trained for. Types of

in-service training do not vary greatly by type of library. Libraries compete with each other for help so that salaries have a tendency to follow the same general lines. The distinctions between professional, sub-professional, and clerical duties are much the same in all types of libraries, and so are the standards which would suggest what proportion of each type of library worker is needed. Even costs and time taken in cataloging are more likely to be influenced by the detail of entries or the need for additional subject headings rather than by the type of library. Interlibrary cooperation, because it exists more often between libraries with mutual interests in subjects covered than between libraries of the same type, is a general factor not peculiar to any kind of library. The same may be said for the principles of good library management, and very often to the place of the library in the general administrative setup.

One of the basic criteria which is common to all libraries is whether or not the library is adequate for its purpose. Adequacy is usually referred to in connection with the bookstock only, but it should be obvious that bookstock is adequate only insofar as it supplies the library user with the materials he wants in the most economical manner when all costs are considered both to the library and to the user. This angle is one of my own personal interests, so I hope you will pardon the introduction of the formula which I feel tells when a library is inadequate. When, in too large a proportion of the cases materials are borrowed it would have been cheaper to have owned, and the costs fall into the group expressed by

$$\sum_i \left(\frac{C_o}{N_u} + N_o C_p < N_r C_b + N_f C_s \right)$$

the library is clearly inadequate. The significance of this formula lies in the fact that it includes within itself all of the costs in the operation of the library from acquisitions, cataloging, and service (C_o) to inter-

library loans (C_b), as well as all of the costs that accrue to the reader in using the library, or in connection with his use of some other library in place of his own (C_p and C_s), together with the number of times used (N).

Next there is the question of how users of the library do their work. This is covered in Section VII of the bibliography. If one of the standards of a good library is its ability to meet the needs of its users, it is highly important that we know what those users really want and how they use the material. This is one subject about which librarians, as a class, know little, and that lack of knowledge seems to be just as great among the scientists and research people themselves. Much of what we already know was summarized by Shaw in connection with his study of the use of the library of the Forest Products Laboratory in Madison, Wisconsin. Some additional information was supplied at the International Conference on Scientific Information held in Washington in 1958. Particular mention might be made here of the paper by Christopher Scott, which has been issued in fuller length in England.

At the time of writing this comment the bibliography is still in the process of typing, mainly because, when serious thought was given to the idea, it seemed clear that the list should include references on a number of related subjects which had not been considered in the preliminary gathering of entries, some parts are as yet more sketchy than they should be. Also because of some of the angles it seems desirable to include a section at the end on "The Philosophy of Librarianship." The preliminary gathering of materials, it might as well be confessed, was for purposes that had an association with standards but was not an attempt to be inclusive. Suggestions for additional titles, or subjects that should be treated, will of course be welcome.

THE TECHNICAL LIBRARY

and its

ADMINISTRATIVE JUSTIFICATION

by

LOGAN O. COWGILL

Librarian

OFFICE OF THE CHIEF OF ENGINEERS

Department of the Army

Washington, D. C.

The Technical Library and its Administrative Justification

Good morning, ladies and gentlemen. I would like to suggest an alternate title for my presentation here. It could also be called, I think: "Talking Library Service". And to talk library service purposively, there are certain, more than rhetorical, questions that we can ask ourselves: first, what are we talking about when we talk about a library service; second, to whom will we or should we be talking in order to secure most effective support for our particular kind of library service; and finally, where and how can we do this talking most effectively. This sounds like a lot of talking, you may say; and certainly, I think that all of us sometimes feel that there is perhaps too much talking in the world; but I believe, nevertheless, that face-to-face talking is still the most effective method of influencing human beings, television notwithstanding.

Now as to what we are talking about when we talk library service, I think, by definition, all libraries are service or support organizations which facilitate in some manner access to recorded information; otherwise the variation between them in amounts and kinds of service is so extensive as to give the word library a most rubbery meaning.

In talking library with others it has been my experience that the word library wears a halo of connotations which is sometimes angelic and sometimes devilish in its effects upon mutual understanding about current and future potential of a given library service; that is, the word library too often connotes only a passive accumulation, arrangement, and care of a certain category of physical objects, called books or publications, plus perhaps a place of withdrawal from worldly cares for leisurely perusal of said objects. Thus, it is not without mixed feelings that I sometimes hear some such surprised comment from users as: "Why your phone rings as much as mine!" This

passive and too pervasive concept, this belief that the library is: a place where, a sort of information mine to which, the user comes, mostly at his leisure, or when he does not have anything particularly pressing to do, to dig up for himself some interesting tidbits of information for an overdue technical paper or to win a luncheon argument; this is the devilish aspect of the word library.

Fortunately the angelic aspect of the word library is not without some influence even in this, our present sinful age. Among many users there is still a latent belief that the library and the librarian are parts of a "learned world" for which they have an at least wistful respect. I suggest that is possible, indeed necessary to use this aspect of the word library as our ally in the struggle to overcome the negative aspects of the word. This lingering respect, which was won for us by preceeding generations of librarians, who were more that technicians, more than processors of information, who were scholars and thinkers in their own right, should be used to reemphasize the integral role of the library, its non-expendability, with regard to any effective implementation of the scientific or engineering method. It should not be possible to think about scientific or engineering effort in any field apart from the consideration of a library's part in that effort, any more than it would be possible to consider, let us say, a missile apart from its launching facilities. I submit that the library should indeed be the launching pad for any worthwhile research and development project.

To restate our definition: I believe that the library is both a place where important work is done by both staff and user, and a place which is an integral part of the organization supported.

Next, to whom will we or should we be talking in order to secure the

most effective support for our library service? After having stated our credo of what a library service is, who are the converted, whose faith we must strengthen; who are the unconverted, to whom we must bring this message?

They are, or course, the library's users; and may their tribe increase! So also they are the library's non-users; and may their agnosticism be overcome!

To know who our users are is to learn why our library is used, and this would seem to be a basic requirement for action. This information must, I believe, be obtained empirically, by a careful analysis of actual procurement or reference requests, and by a discrete questioning of the requester himself. It cannot be assumed, for example, that, if the majority of our agency's staff is composed of hydraulic engineers, and its mission is hydraulic research, the most important and most used part of our collection will be definitive or the latest publications in that field. An analysis of actual reference questions, and the reasons why they were asked, or why the requested couldn't find an answer within his own resources, may show that certain publications about related fields are as important or even more important to our users, because they perhaps feel the need of publication support more in peripheral areas than in their own. In other words, we should not succumb too easily to the temptation to attempt comprehensive coverage of a certain field solely because this field is within the official mission of the organization. Comprehensive coverage may enhance our reputation with other libraries who may be interested in inter-library loans, but it may be far from the most effective use of always limited budgets from our users point of view. Moreover, knowing why our users ask the questions they do, and what they do with answers after they get them, is also the necessary information that we must have in order to do a good job of cataloging or organizing our collection.

Nor, of course, can we neglect our non-user. Who is he? Statistically,

he is usually only a negative factor, more or less discretely concealed in our work-load data; but he is human, even as you and I, and he can be talked to, if you know where to find him. Who and where is he? We may be surprised, because is often, at least in my experience, a noted engineer as well as a routine clerical worker. Perhaps, even more piquantly, he is our own boss, or other superior in our administrative heirarchy. This is perhaps more often true if we are located in an administrative support group rather than in a technical operation; but even in the latter, especially if in one of any size, we may find that our boss, good scientist or engineer that he may have been, is now in practice more administrator than scientist. This suggests, I believe, that even the most technical library should not prune its non-technical holdings so thoroughly as to remove its basis for service to administrative people. It has been my experience, in a perhaps extreme example, to visit a technical library, which did not have, and did not know how to go about obtaining copies of the Civil Service job standards in the GS-1410 series.

Another type of non-user is the fellow who has amassed his own collection. In this case, we ought to take occasion to examine his collection objectively. If it is as good as the library's, insofar as his own needs are concerned, we should probably beat a strategic retreat, at least for the moment, for he has proved himself as good a librarian as we. If, as is more probable, his collection is more mass than selection, we should take opportune action with concrete example to give superior service by the way of illustrating our library's better selectivity.

Still a further kind of non-user is the type often referred to as "not book-minded or literature minded". What does this mean? I believe we will find that there is a person who believes that the library is not oriented towards his particular information. He is one who believes, perhaps, that

libraries are mainly for librarians, or, at least for "readers," those different people who always seem to have more time for "this sort of thing" than he does. I am sure that everyone has met the non-user who says: "You must have some wonderful things here, I wish that I had time to read some of them." And he may be often right in thinking about those libraries are only places where reading is done. This type is often the toughest nut, no pun intended, to crack. How to crack him? By showing that, to avail himself of library service, he need not find time to come in, sit down, and peruse a publication. He need not even enter the library; all he need do is to ask a question. And from listening to his luncheon and corridor conversations we can be sure that he has many work-connected questions which can be answered by the library without requiring his reference to specific publications.

As to where and how we should talk library service; I believe that it is most effectively done on the home grounds of the user. This means, for the librarian that he must find time to spend a significant part of the work week outside of the library: in the offices, the lab., on the construction site— From quite casual conversations will come opportunities for library service. And opportunities, as important, for the librarian to learn the necessary, but sometimes exasperating difficult to find out, facts about what his organization is doing on a day-to-day basis.

APPLYING MANAGEMENT CONCEPTS TO THE PREPARATION OF A TECHNICAL INFORMATION BULLETIN

Michael A. Costello

and

Henry Voos

Librarians
Feltman Research and Engineering Laboratories
Picatinny Arsenal
Dover, New Jersey

AFFLYING MANAGEMENT CONCEPTS TO THE PREPARATION OF A TECHNICAL INFORMATION BULLETIN*

The quality of a library today depends not so much on what it holds, as on how efficiently it makes its holdings available to its users. Ficatinny Arsenal's Technical Information Section has found that the best instrument for making its holdings known is its Weekly Bulletin. The Bulletin has often been changed to make it more useful to scientists. It has evolved from an unorganized list of newly received reports and books to its present form of a unified Weekly Bulletin of reports, books, patents, tables of contents, notices of scientific meetings, and selected current abstracts of technical literature (Exhibit I). The present Bulletin reaches about 800 scientists and engineers.

The Bulletin has served its purpose almost too well. The demands for services and materials which it has created have overtaxed the Library's ability to meet them. Since we couldn't increase our staff, we had two choices: reduce the scope of the Bulletin or, reduce the time and effort needed to produce and distributed the Bulletin. Since the last thing a library is willing to do is to cut services, we chose the second course. To that end we studied the following:

1. Typing operations, including catalog cards and charge cards.

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*Costello, M. A. and H. Voos. Preparation of an Information Bulletin. SPECIAL LIBRARIES. 50:454-54 (November 1959)

2. Method for ordering publications listed in the Weekly Bulletin.
3. Circulation procedures based upon requests received.
4. Cost of preparation and distribution.

Typing

Shortage of typists was our most serious problem. We used to type the same material three times: on duplimat for the Bulletin, on vellum for the catalog cards, and on cards for the charge cards. This was first simplified by using the Ozalid vellum for both the Bulletin and the catalog cards. This is done by making negatives from the original vellum and then burning plates from the negatives. These plates or mats are then put on an offset press and the required number of copies are run off. While this is going on the original vellums are reproduced by Ozalid method on card stock. Enough cards are reproduced, cut, and punched for the entries required. This consolidation saved 50% of typing time at no additional cost.

It became obvious to us that the reduction of each Bulletin entry to 4 x 2 1/2 with the actual body of the entry occupying approximately 3 1/4 x 1 3/4 inches on this card would permit the same entry to be used for the charge cards. Six additional copies of each Bulletin page were therefore reproduced and perforated on gummed paper stock. Although the time saved was slight, because the pasting time equaled the typing time, it eliminated another typing operation and substituted a cheaper pasting operation. Preparing the Bulletin, charge cards, and catalog cards by this method saved approximately $3200.00 a year.

The final item to be studied in this connection was the catalog card itself. There were two types of cards being typed: the card for technica l reports (Exhibit 2), and the book card (Library of Congress format, Exhibit 3).

The use of these cards had the following disadvantages:

1. The card for technical reports.

a. Because only 2/3 of the width is available for entry, the typing is more burdensome (especially on a manual typewriter).

b. The cards are difficult to read because the information is so crowded.

c. It is necessary to read below the midline of the card for added entries on the right side of the card.

2. The Library of Congress catalog card.

Added entries are typed on verso or bottom half of card. This requires additional typing or expensive processing to place the heading at the top of the card.

Because of these disadvantages a new single card was designed (Exhibit 4). In April 1958 we learned that Miss Loretta Kiersky, of Bell Telephone Laboratories, had developed a similar card. This card is shown in the referenced article by Miss Kiersky[1].

The advantages of this card are manifold: (1) They eliminate decisions by

1. Kiersky, Loretta J. "Reproduction: an integrated function of the Technical Information Library." SPECIAL LIBRARIES. 49:386-8 (1958).

the typist as to which format is to be used for reports and which format is to be used for books. They eliminated also the need for changing and adjusting tabs. (2) Added entries are always at the heat of the card. (3) Filing medium is indicated by an arrow or is underlined. This means that a person using the catalog always has the headings he is looking for in front of him and need not search at the side of the card, as he does for technical reports. (4) Since the title can now be indicated by an arrow there is now no need to type the title across the top of the card. The same holds true for series notes.

Ordering of publications listed in the Weekly Bulletin.

It is not enough to publish a bulletin showing the existence of technical information. It is also necessary to make this information available expeditiously. Therefore, the ordering medium was studied and changed. Originally, an order sheet prefaced each Bulletin. On this the scientist listed his requirements. When the Library received this order it meant posting the accession or call numbers to each charge card. This necessitated multiple handling of charge card, was time consuming, and resulted in serious backlog in posting of these requests.

To correct this we simply had the Bulletins perforated so that each entry could be separated from the Bulletin and used as an order slip. The scientist writes his name and address on the slip and forwards this as a request to the Library. These slips would be arranged numerically by call number or accession number with no excess handling. They are then put into a book

pocket which is our main numerical card and there fi ed in order of receipt. Routing the report was very simple. We removed the slip, posted the man's name on the signature card, a id forwarded it to him. On its return the order slip is destroyed or returned to the requester for his bibliographic file. The systems change from the order blank to the perforated order slips to consolidation by insertion in book pockets, saved approximately $4261.00 per year.

Circulation

Simplification of ordering and circulation as described above should be expanded in terms of the use of the book pocket as the charge card for the numerical file. This permits complete elimination of postings or handwriting on that card. The slip or multiform request is pulled from the pocket and destroyed upon return of the document. What may now be considered an obsolete circulation system is necessitated by the receipt system that must be maintained for classified documents.

Preparation and Distribution Costs

The cost of preparing and distributing a 41-page bulletin is tabulated below.

COST FOR A TYPICAL ISSUE OF THE BULLETIN OF 41 PAGES

FILM

9 x 12 film	34 x .17	$5.78	Reports from vellum.
12 x 18 film	7 x .30	2.10	Table of Contents
	Total -	$7.88	

PRE-SENSITIZED DUPLIMATS

41 x .16 Total $6.56

PAPER

9000 8 x 10 1/2 18.00

Add gum stock .36

Total $18.36

LABOR

Shoot and develop	5 1/2 hours	
Mask and opaque	4 "	
Burning	1 1/2 "	
Printing	2 1/2 "	
Perforate and collate	11	
Total -	44 1/2 hours at $2.50 per hour	= $111.25
	Typing - 12 hours	= 15.84
	Distribution - 1 hour	= 1.32
	TOTAL COST of 200 Bulletins	= $161.21

The costs include material and direct labor but not overhead. The cost per Bulletin is 81 cents. It must be understood that a bulletin such as we describe can be prepared only if you have in-house facilities for printing and reproduction, sufficient distribution means and a volume of circulation large enough to justify the cost of the bulletin.

In this paper we have tried to show two things: first, that a technical information bulletin is one of the most effective means of disseminating technical information, and second, that any operation can be simplified and made more efficient if good management and industrial engineering concepts are applied.

INSTRUCTIONS FOR REQUESTING LOAN OF LIBRARY MATERIALS LISTED IN THIS BULLETIN

The Supervisor shall circulate *complete* copies of this Bulletin to insure that the information contained herein will reach all those who have a "need-to-know." The offices of supervisors to whom copies of the BULLETIN are sent shall be responsible for consolidating requests for transmittal to the Technical Information Section (Library).

REQUESTING REPORTS, PATENTS, BOOKS, PAMPHLETS AND ABSTRACTS OF SELECTED CURRENT LITERATURE:

The following information is to be written on the slip for a desired item:

Requestor's full name
Division, Laboratory, or Office
Building number
Priority

Order of routing shall be determined by three priority designations:

Priority A Items obviously and urgently needed on assigned projects.

Priority B Items probably of interest in connection with assigned projects.

Priority C Items needed for education, general background, or other reasons.

The priority-routing system is intended to provide first routing to persons with the greatest need. A request on which the priority is omitted will be treated as Priority C. The priority system works only if library materials are returned when due, so that demand can be satisfied.

The supervisors' offices shall be responsible for removing slips for requested materials and sending them to the *Technical Information Section, Bldg. 171N.*

REQUESTING PERIODICALS:

The perforated slips preceding the "Tables of Contents Section" are to be used for ordering. Do not return any of the tables of contents to the Library.

The requester is to put his name, building number, and segment on those slips which refer to periodicals of interest to him. After the *complete* "Tables of Contents Section" has circulated through the entire segment, the slips are to be arranged with the periodical titles in alphabetical order and forwarded to The Technical Information Section, *Bldg. 172.*

The "Tables of Contents Section" may be kept in the segment for reference and as a reminder of items requested.

Compliance with the above instructions will enable the Library to serve the Arsenal personnel more expeditiously.

EXHIBIT 1

INTRODUCTION

This BULLETIN is composed of six parts:

Part I lists *Scientific and Technical Reports.* It is arranged by the broad subject categories listed on the "Contents" page.

Part II lists *Patents* which are considered to be of interest. The patents are arranged according to the subject classification system of the U. S. Patent Office, (Issued irregularly.)

Part III lists *Scientific and Technical Books and Pamphlets.* These are arranged according to the U. S. Library of Congress classification system. The page preceding this part explains the classification. (Issued irregularly.)

Part IV consists of *Tables of Contents* of selected scientific and technical journals. The arrangement is according to the broad subject categories listed on the page preceding this part.

Part V consists of *"Calendar of Meetings and Events."* (Issued irregularly.)

Part VI consists of *"Abstracts of Selected Current Literature."* The Literature Research Unit of the Technical Information Section provides these selections from current unclassified literature. This material will be included in bibliographies currently being prepared.

(See Instructions for Requesting Library Materials on next page.)

AD 205191 Accession No. _____

Feltman Research and Engineering Laboratories
Picatinny Arsenal, Dover, N. J.

EFFECT OF WATERVAPOR TRANSMISSION RATE ON CORROSION RATE

Roswell H. Evans, Theodore Fruchtman

Technical Report 2580, December 1958, 22 pp, tables, figures. DA Proj 5B91-07-001, Ord Proj TB4-672. Unclassified Report

A new method for relating the rate of corrosion of packaged ferrous items to the watervapor transmission rate of the material in which they are packed has been developed at Picatinny. Materials of a wide range of watervapor transmission rates were simulated by using bags (all made of MIL-B-131B barrier material) in which a specific number of small holes had been punched. A humidity-sensing element connected to

(over)

UNCLASSIFIED

1. Ordnance-Corrosion prevention
2. Packaging-Corrosion prevention
3. Corrosion research
4. Watervapor-Corrosive effects

I. Evans, R. H.
II. Fruchtman, T.
III. Ord Proj TB4-672
IV. DA Proj 5B91-07-001

UNITERMS

Water
Vaper
Transmission

UNCLASSIFIED

an electric hygrometer was sealed inside each bag, and the bags were stored under 100°F, 96% RH conditions. The time required to reach critical moisture content (60% RH) was determined, and a chart summarizing the results was prepared. The 60% RH level was chosen as representing critical moisture content on the basis of available data and literature. Above the 60% level, the rate of corrosion increases markedly.

Factors other than moisture which contribute to corrosion, such as temperature and atmospheric pollution, were disregarded in this study.

UNCLASSIFIED

UNITERMS

Rate
Corrosion
WVTR
Package
Ferrous
Ordnance
Moisture
Barrier
Material
Evans, Roswell H.
Fruchtman, Theodore
Ord Proj TB4-672
DA Proj 5B91-07-001

UNCLASSIFIED

EXHIBIT 2 - Technical Report Catalog Card

New York. Engineering Societies Library.
Bibliography on filing, classification, and indexing systems for engineering offices and libraries. New York [1964]
16 l. 29 cm. (Its ESL bibliography, no. 9)

1. Engineering libraries—Bibl. 2. Library science—Bibl.
I. Title. (Series)

Z5852.N55 no. 9 016.09668 64-6711
Library of Congress

EXHIBIT 3 - Library of Congress Catalog Card

TP848 1. Glass. I. Title.
S6

Soveshchanie po stroeniiu stekla, Leningrad, 1953.
The structure of glass; proceedings of a conference on the structure of glass. New York, Consultants Bureau, 1958.

1. Cyclotrons. I. Ramlet, W. J. II. Parker, G. W. III. Contr W-31-109-Eng-38.

U66781
Argonne National Laboratory.
THE ARGONNE 60-INCH CYCLOTRON. By Ramler, W. J. and Parker, G. W. Feb. 1959. ANL 5907. Contr W-31-109-Eng-38.

EXHIBIT 4 - Redesigned Technical Report and Book Catalog Card

Summary

A brief discussion peri[illegible] revealed that: (1) copies of library organizational charts which Mrs. Cason had procured would not be published; (2) Mr. Costello distributes 225 copies of his Technical Information Bulletin which have further routings by the recipients; (3) The arrangement of the reports listings in the bulletin is by group under broad subject headings; (4) Mr. Costello has not investigated the use of a Flexiwriter for the preparation of bulletins. Mr. Luckett, however, added that the Naval Postgraduate School does find the Flexiwriter to be satisfactory for this use.

The moderator asked Mrs. Brode if action should be taken, at this time, on her recommendation regarding establishment of committees to study existing standards and to compose sets of applicable standards. Mrs. Brode thought this a matter of action to be determined by the entire group of Military Librarians. The Moderator then directed Maggie Cason, Secretary of the panel, to present the recommendation at the final session.

Dr. Evans was introduced as the former Librarian of Congress and Director General of UNESCO. Dr. Evans discussed briefly the plans of the Brookings Institution survey of Federal Libraries. Financed by a $72,965 grant from the Council on Library Resources, Inc. the survey will be the first major over-all appraisal of Federal library facilities, and it is expected to provide a foundation for future planning and coordination of Federal library activities.

The survey will concentrate on the libraries of the Executive Establishment in the Washington area. Sufficient attention, however, will be

given to the libraries of the Legislative and Judicial Establishments to provide the basis for discussion of the interrelationships of the Federal libraries as a group, but not such as to direct attention to such areas as the many special activities of the Library of Congress.

Regional problems will be investigated on a sampling basis. The libraries of Federally supported higher education will be considered if found to have functional relationships with other libraries of the Federal System.

In addition to the resources of the Brookings Institution, the survey will rely upon the cooperation of the Federal librarians and their agencies for basic data and for the identification and analysis of key problems. Dr. Evans mentioned at this point that the questionnaire is a lengthy one. The ultimate result though will provide a solid factual basis on which improvements in policy formulation and administration can be made.

SUMMARY SESSION

Moderator

Paul J. Burnette

Director

The Army Library

Washington, D. C.

Saturday, October 10, 1959

Saturday's session was given over to a review of the accomplishments of the Workshop and to recommendations for future meetings. Mr. Holloway reviewed the two previous workshops and Mr. Stewart discussed anticipated uses of the Union List of Military Periodicals, one of the concrete results of workshop collaboration. Miss Craig presented a paper on one of the aspects of cooperation, mutual dependence and central depositories. Mrs. Hooker proposed a method of control of subject bibliographies prepared by or for the Department of Defense.

Dr. Luther H. Evans outlined for the Workshop the Survey of Federal Libraries and explained the questionnaire which will be used in this study being made by the Brookings Institution.

Final actions were the expression of appreciation to Admiral [illegible]mans, Professor Luckett and the Staff of the Naval Postgraduate School for being host to the Workshop and the acceptance of an invitation from Heaton Heald to hold the Fourth Workshop in October, 1960 under the sponsorship of the Armed Force[illegible] Technical Information Agency, Arlington Hall, Virginia.

SUMMARY

OF

PREVIOUS WORKSHOPS

by

O. WILLARD HOLLOWAY

Librarian

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Summary of Previous Workshops

On this day down through the annals of history we have seen many important historic events. On this day in 1845, the U. S. Naval Academy was opened at Annapolis, Maryland. In 1911 the Manchu dynasty was overthrown by Dr. Sun Yat-sen.

Yesterday and the day before were also dates which have given us great historic events. On October 8, 1871, Mrs. O'Leary's cow kicked over a lantern and started the great Chicago fire. Eddie Rickenbacker, one of the great names in aviation, was born on October 8, 1890. In 1918, Sergeant Alvin York achieved immortality by his bravery in the Battle of the Argonne Forest. In 1942, the first contingent of WAVES started military training. On October 9, 1781, George Washington set off the first gun at the seige of Yorktown. On this day in 1701, Yale College was founded. On October 9, 1894, a New York audience witnessed the first showing of a "Magic Lantern" feature picture.

Two years ago this month, forty-seven military librarians met at the Air University for a three-day military librarians workshop. They discussed the major problems confronting military librarians in this country and Canada. One year later, this same group, plus a few others, met again at Fort Sill, Oklahoma. Today, we are concluding the Third Workshop along the same lines.

The purpose of these meetings was well stated at the first workshop, and I think we should refresh our minds on this statement of purpose. It is as follows:

1. To provide a homogeneous medium for the exchange of useful information concerning professional and technical practices of military librarianship.

2. To devise ways and means of utilizing most effectively and most economically the resources available to the entire community of military libraries.

3. To promote the initiation and development of projects and programs which will tend to increase the usefulness of military libraries.

4. To seek methods for improving the acceptance and use of libraries and library materials by military personnel and others concerned with military activities.

5. To promote instruments for creating an ever-increasing recognition of the military profession and of a segment within it, military librarianship.

6. To provide a suitable forum for the presentation of ideas, plans, projects, or any type of report or activities bearing upon any of the above named purposes.

Now, let us review briefly the positive results of the previous meetings. Some very concrete things can be listed:

1. We have established working relationships between military libraries which will be a pattern for future development.

2. We have succeeded in gaining wider recognition of the military library as an important function of any military organization.

3. We have increased the free exchange of information and material.

4. The Air University Periodical Index has been expanded and improved.

5. We have published a directory of military libraries of the United States and Canada.

6. We have begun serious research on such things as comparison of facilities, staffs and organizational procedures.

7. We are working on a union list of military periodicals

Other more specific results could be listed. They are familiar to everyone. I think most important of all is the fact that we have positively established the profession of military librarianship. In so doing we have achieved that recognition which is needed if we are to completely fulfill our missions. For many years, this country has been involved in a unique war, which some people have referred to as the "cold war". It is a war unlike all others throughout history. It is a war which is forcing the mobilization of every possible weapon to assure the ultimate victory over dictatorship. The weapon which we military librarians have to offer is that of information and research assistance. The experience of the United States Information Service Libraries throughout the world has proven conclusively that information based upon fact and reality will eliminate as many communists as will conventional military weapons. Those of us here today are manning this great weapon of truth.

There is still much that we can do in this workshop and in future meetings to improve our operations and to make our efforts more productive. Further expansion of the military periodical index is necessary. More effective interchange of materials should be accomplished. Simplification of work tasks and encouragement of interlibrary loans will aid us. Cooperative projects for the downgrading of classified documents should be undertaken. We should continue our endeavor for more sympathetic understanding on the part of officials of the Civil Service Commission. This is with reference to both salary rates and more effective personnel recruiting programs. Two years ago we briefly discussed the possibility of the exchange of staff members between military libraries. Further discussion of this subject should be continued.

We have now come to a turning point in our operations. By the conclusion of this workshop, we should have developed a pattern for the future of this organization. I am confident that great progress will be made. However, we will never solve all our problems, but our efforts will result in better and more efficient Library service to the military organization of which we are a part.

M A K I N G U S E O F T H E U N I O N L I S T

O F

M I L I T A R Y S E R I A L S

by

Charles H. Stewart

Librarian

Dept. of National Defence Library

Ottawa

Canada

3RD MILITARY LIBRARIANS' WORKSHOP

CHARLES H. STEWART, DEPT. OF NATIONAL DEFENCE LIBRARY

MAKING USE OF THE UNION LIST OF MILITARY SERIALS

The Preliminary Edition of the Union List will be ready for distribution in the next two of three months after many months of effort by a small group under Mrs. Catherine Quinn.

The uses that can be made of the Union List are numerous. I am listing a few of the more obvious ones with some of the problems involved.

1. INTER LIBRARY LOANS

a) Wonderful scheme for small libraries which are almost always on the receiving end.

b) Larger libraries, usually on the loaning end, find volumes become worn, requiring rebinding; volumes not available when own users require them.

c) Some libraries will not lend certain periodicals but provide microfilm, photocopy, etc. copies of articles required. This involves payment, which is necessary but is a nuisance to the borrowing library involving perhaps the raising of a purchase order.

What is the answer to these problems? In some cases, libraries receiving several subscriptions of widely used titles could hold duplicate sets of more recent volumes, or this could be done on a regional basis from within...

Larger libraries could send duplicates to regional depots requesting those specific titles on a continuing basis. Use could be made of the Air University microfilming of periodicals projects, by sending a microfilm negative of a title required by Air University for four times the amount of microfilm positive of any of the titles available there. The use of standard-value coupons for microfilm photocopy etc. is the simplest answer to that problem but this raises problems of its own.

2. THE EXCHANGE OF DUPLICATES

This is a project for completing runs of periodicals by sending lists of missing numbers to libraries having runs of same titles in the Union List or, in reverse, Libraries having duplicates in volumes noted as incomplete in the Union List could send card indicating what they have available.

3. COOPERATIVE ACQUISITION PLANNING

Cooperative acquisition planning is basically the responsibility of providing a complete coverage to be shared by a number of general and specialized military libraries. Certain specialized libraries might agree to undertake to acquire, as far as possible, all material relating to their fields and to make their resources available to those needing them without prejudice to the claims of those for whom the libraries primarily exist. The intention of such a scheme is not to limit the acquisitions of each library, but to ensure a planned scheme of selection from the vast supply...

of periodical material available so that as complete a subject coverage as is required is available to members of the cooperative association.

The acquisition and preservation of runs of Military periodicals is the most applicable to our group. It is a form capable of application on the regional as well as on the subject or service plane, because of the generality of so many periodicals and the over lapping of border line interests of apparently widely divergent subjects. The attraction is the ease with which a scheme can be put into operation on a basis which will last for years, which is not dependent on the vagaries of selection of the individual librarian every time acquisitions are being considered.

The initial step, a union list of serials, is on the road to completion. From this it is possible to discover:

a) Where there is duplication and over which volumes.

b) Which periodicals are not being received by any participating libary and which are not being preserved by any one.

c) Which periodicals, though existing in long runs, are scattered among various libraries and of which no back files exist earlier than a certain, perhaps recent, date...

d) Which libraries are trying to complete long runs of periodicals, the issues of which others are at the point of discarding after a specified period of months or years.

e) Which periodicals, though formerly preserved, are now being discarded because of change of interest.

It is possible to move into such a scheme on a gradual basis with a good spirt of cooperation.

a) We can insure that existing sets of periodicals can be preserved if any library contemplating dispcsal of any titles could find a home for them within our group.

b) Libraries having runs of periodicals to which they no longer subscribe currently may be willing to send their holdings to a library that requires it, possibly on an indefinite loan basis.

c) Smaller libraries in isolated locations could request duplicate volumes from larger libraries having surplus issues at the end of the year. Some of the smaller libraries which have access to untrained helpers could act as regional depots for surplus periodicals.

d) Several libraries in the same region which subscribe tc the same periodicals could maintain one set of back numbers between them o. those titles of comparatively little referen:e value -- or of fringe interest only to their library -- thus saving space and recording.

This insures the retaining library of good copies for binding or keeping unbound with surplus copies going to a regional depot.

The points and suggestions raised in this paper are not exhaustive but were put down to stimulate thought and action.

I would like to see a committee appointed to study the uses that can be made of the Union List and present a workable scheme or schemes for making our periodical holdings of more use to Military Librarians as a group. A preliminary paper could be presented in our program at the SLA Convention with a concrete plan for the next workshop.

CENTRAL DEPOSITORIES

FOR

MILITARY LIBRARIES

by

MARIAN CRAIG

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U. S. Naval Weapons Laboratory

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Virginia

CENTRAL DEPOSITORIES FOR MILITARY LIBRARIES

For purposes of this discussion I have thought of central depositories for military libraries not primarily as storage centers - ipso facto - but rather as clearly defined collections in subject areas, or limited in the type of information to be covered. Such depositories as ASTIA, ONI for the Navy, Battelle Memorial Institute, Defense Metals Information Center come first to my mind.

Because of the diversity of our individual library missions, some of them highly specialized serving research laboratories, Bureaus, Corps., or specific agencies, Staff and Service schools, and special service libraries for both military and civilian personnel, it would be impossible to maintain general depositories for all military libraries.

Robert Downs, in a paper on the subject of cooperation in acquisitions,[1] says that the key to successful cooperative acquisition programs is specialization of collections. I feel that the same is true of useful practical depositories for our military libraries. I also think that the value of central depositories for us is not in storage centers (even apart from the space saving element which is very important) but in active centers servicing specialized resources particularly suitable to the needs and requirements of our military libraries.

Most of us work out our own methods of borrowing and acquiring little used published materials. Those of us working in the Washington area are more fortunate than many, because we have large departmental and laboratory libraries specializing in broad areas of specific subject matter on which we call to borrow periodicals and other publications in special fields.

Speaking from the viewpoint of a rather small research library, 50 miles from Washington, we are greatly dependent upon the good will of our friends in the Navy, Army and Air Force for interlibrary loan of publications which

are not in our library collection. In a limited sense, in the military establishment each departmental library performs in some manner a depository function for its field activities; e.g., as a field activity of BuOrd we feel we can call on them for any of their own contractors reports or an older report of one of their activities.

As examples of central depositories handling specialized information the two I am most familiar with are ASTIA and ONI for the Navy. Battelle Memorial Institute, Defense Metals Information Center is operated under the Office of the Director of Defense Research and Engineering. It collects, stores and disseminated technical information about special metals used in aircraft, missiles and other military weapons. Army Map Service is the central library of topographic maps of the entire Department of Defense.

The SLA Translation Center as well as Office of Technical Services (OTS) perform functions of special importance to many of our military research libraries. The Atomic Energy Commission (AEC) has its own depository system of libraries throughout the country handling its unclassified reports.

ASTIA is the only place where theoretically a DOD agency, military or contractor, may find collected in one place all research and development information within certain security limitations put out by DOD. In actual practice this is not so because ASTIA does not receive complete coverage of all this information, which hampers its function and role to using agencies. This also must be part of the reason why it is difficult to get some documents from ASTIA, since ASTIA must first have a request before it can take action to acquire a document, if it has not already received it.

ASTIA's functions as stated in the designated AFR, AR and OPNAVINST. is to provide a central service within DOD for the official interchange of scientific and technical information consistent with effective security in order to promote progress and economy in research and development and to prevent

unnecessary duplication of such services.

As a central depository for reports, ASTIA eventually should eliminate the duplication which exists among our library collections. I can cite an example of personal experience. In a recent management survey which our library requested, one of the suggestions discussed has been a recommendation to discontinue all copies of the library stock file of earlier laboratory reports and maintain a file of only the past few years to fill requests from other activities. This is a logical, practical solution to limitations of space and duplication of effort among many libraries. I have only to overcome my packrat tendencies and my natural reluctance to eliminate this early primary source material - even after determining that ASTIA has it - because I know having to refer a request elsewhere will delay its receipt and usefulness to the requesting agency. Eventually in the Washington area, perhaps all files of formal research reports will be at ASTIA. There will only be the need for any laboratory to keep a very current file of its own research reports.

A central depository, no matter how efficient its service or specialized its resources, can never take the place of the individual small library within a military agency. In fact the central depository needs the small individual library to implement its services - just as the individual library needs the depository; e.g., there are many types of reports which ASTIA is not responsible for and which must be the responsibility of the individual library such as technical memos, notes, test reports, etc. which may not be given wide distribution and which may not be considered research and development reports.

The only way in which some information is available to us at all is by way of a central depository through which publications may be requested or funneled to using agencies. I am thinking of ONI which is responsible to the Naval Establishment for the collection, documentation, dissemination and maintenance of foreign scientific and technical information of naval interest,

in particular, the areas of weapons and weapons systems. For Navy libraries this is the only way legitimately to get distribution of a report of a foreign government. We cannot request directly - except through ONI - and I imagine this works the same for the other services through their own channels.

I have stressed depositories of specialized information to the exclusion of other types of depositories and those of the published literature - but I believe the former area is where the greater need lies for us.

The Library of Congress, National Library of Medicine, John Crerar Library, the great University collections are accessible to us for published literature. Perhaps the importance of any sort of depository, aside from space, is in the ability to offer access to certain types of materials whether hard-to-get, expensive, translations or other forms of research materials, specifically used by military libraries.

[1] Downs, R. B. Cooperative planning in acquisitions. Southeastern Libn [illegible]-15 Fall '56

SUBJECT BIBLIOGRAPHY

A PROPOSAL FOR CONTROL IN THE DEPARTMENT OF DEFENSE

by

RUTH H. HOOKER

Librarian

U. S. Naval Research Laboratory

Washington,

D. C.

Subject Bibliography

At the beginning of any scientific research project the scientist needs a review of work previously done on the subject. In the Department of Defense, this may be as a contract for a special bibliography; it may be incidental on a contract for research; it may be a bibliography prepared by a DOD agency or it may be incidental to research by such an agency. Regardless of the way it is done, it is time-consuming and expensive, and the Department of Defense does spend a fairly large sum on subject bibliographies. In order to reap benefits from this expenditure the entire Department of Defense should make the greatest possible use of them. There should be some means of preventing wasteful duplication.

Whenever a new subject has great potentiality, work in that field may start simultaneously in several places. A recent example of duplication of bibliographic effort will illustrate this point.

About a year ago money was transferred from one of the Naval Bureaus to NRL for a bibliography on thermoelectricity. As a result Thermoelectricity Abstracts is now being issued at intervals, about quarterly. However, before the first issue came out it was discovered that a Navy contractor was working on a thermoelectricity bibliography and another Naval field installation prepared and issued a short one. There are doubtless other duplications and it is probable that much more use can be made of those prepared if there were easier ways to know about them.

It appears that some central spot or some publication could correlate subject bibliography for the Department of Defense. In the Navy, a very small beginning has been made in the Council of Librarians of the East Coast Naval Laboratories. The West Coast group will probably join in this project. However, to be of the most use it should be Department of Defense

wide. I propose that the Military Librarians organization participate in this project. It could be patterned after the Atomic Energy Commission bibliographic project, as exemplified in the "Eleventh List of Bibliographies in the Atomic Energy Program," dated June 1, 1959. This comes in parts: bibliographies issued and bibliographies in preparation; both in a classified and an unclassified section. Perhaps we might add a third category: Bibliographies needed or planned.

In connection with the project by the East Coast Naval Librarians, a sample has been prepared of what might be number 1 of such a listing. Circulating this has raised a number of questions:

1. Would a publication such as the AEC example be sufficient?
2. Would the unclassified ones be available to list in SLA?
3. Should a "pool" or collection of them be kept in one location?
4. Should copies be deposited at ASTIA or OTS?

Perhaps many other questions will occur. Any criticism of this proposal are welcome and should be addressed to:

Mrs. Ruth H. Hooker
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October 8, 9 & 10, 1959
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